

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)

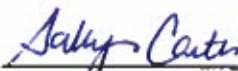
))
PROPOSED NEW 35 ILL. ADM. CODE 204)
PREVENTION OF SIGNIFICANT)
DETERIORATION, AMENDMENTS TO 35)
ILL. ADM. CODE PARTS 101, 105, 203, 211)
AND 215)R19-1
(Rulemaking – Air)**NOTICE**

TO: Don Brown
Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph St., Suite 11-500
Chicago, IL 60601-3218

SEE ATTACHED SERVICE LIST

PLEASE TAKE NOTICE that I have today electronically filed with the Office of the Clerk of the Illinois Pollution Control Board the **POST HEARING COMMENTS**, a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: 
Sally Carter
Assistant Counsel
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DATED: January 24, 2019

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**BEFORE THE POLLUTION CONTROL BOARD
OF THE STATE OF ILLINOIS**

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PROPOSED NEW 35 ILL. ADM. CODE 204)	
PREVENTION OF SIGNIFICANT)	R19-1
DETERIORATION, AMENDMENTS TO 35)	(Rulemaking – Air)
ILL. ADM. CODE PARTS 101, 105, 203, 211)	
AND 215)	

POST HEARING COMMENTS

CHICAGO LEGAL CLINIC

1. The Agency agreed to respond to Citizens Against Ruining the Environment (CARE) Prefiled Question 1 in post-hearing comments. 11/27/18 TR at 17-19. CARE asked the Agency:

In the current rulemaking proceeding Illinois EPA has proposed amendments to 35 Ill. Adm. Code Parts 101, 105, 203, 211, and 215. It is 2 Ill. Adm. Code §2175, however, which governs the Illinois Pollution Control Board's ("Board") "Organization, Public Information, and Types of Proceedings," with Section 600 specifically addressing "Adjudicatory Proceedings." 2 Ill. Adm. Code §2175.600(a) grants the Board the authority to hear certain adjudicatory cases, while 2 Ill. Adm. Code §2175.600(a)(2) governs the "Permit Appeals" the Board may hear. That portion of the Administrative Code provides that "certain third parties may petition the Board for a hearing to contest the decision of the Agency" only in the specific limited instances where "the Agency grants a RCRA permit for a hazardous waste disposal site or grants or denies a National Pollution Discharge Elimination System (NPDES) permit."

This is at odds with proposed 35 Ill. Adm. Code §105.604(c), which appears to grant the authority to appeal an Agency permitting decision to "[a]ny person who participated in the Agency public comment process for a PSD permit and is either aggrieved or has an interest that is or may be adversely affected by the PSD permit." In other words, proposed 35 Ill. Adm. Code §105.604(c) grants the authority to appeal PSD permitting decisions to "certain third parties" like those referenced in 2 Ill. Adm. Code § 2175.600(a)(2).

- a. Is there currently a rulemaking proceeding underway that will amend 2 Ill. Adm. Code §2175.600(a)(2) to include the rights of third parties in permit appeals concerning Clean Air Act PSD permitting decisions?

No.

- i. If this is not the case, what are the practical effects of this on the rights of third parties in appealing final PSD permitting decisions?

None. The cited rules are informational and merely describe the Board's organizational framework and its various activities as granted by the Act. As the Board observes, the rules are intended to "generally explain what the Board is, how the Board is organized and operates, and how the public can get information from the Board." 2 Ill. Adm. Code 2175.100.

When read in the same context, Section 2175.600 describes the types of adjudicatory cases heard before the Board. The provision also acknowledges that the Board may hear other types of cases; in the list of proceedings that the Board is authorized to hear, it provides the following "catch-all": "Other. Any other proceedings authorized by the Act or the Board's procedural rules may be brought before the Board pursuant to statutory authority and any Board regulations adopted thereunder." 2 Ill. Adm. Code 2175.600(a)(11). Clearly, third party appeal rights of final PSD permit decisions as authorized by Section 40.3 of the Act and proposed 35 Ill. Adm. Code 105.604(c) would fall within this "catch-all" provision.

CARE cites to the provision that specifically involves permit appeals (Section 175.600(a)(2)):

Permit Appeal. Any person who, pursuant to Section 39 of the Act [415 ILCS 5/39], has been denied a permit by the Agency, or issued a permit by the Agency with one or more conditions to which that person objects, may file a petition with the Board for review of the Agency's action. If the Agency grants a RCRA permit for a hazardous waste disposal site or grants or denies a National Pollutant Discharge Elimination System (NPDES) permit, certain third parties may petition the Board for a hearing to contest the decision of the Agency [415 ILCS 5/40(b), (e)(1)]. (See 35 Ill. Adm. Code 105)

This provision acknowledges that the Board may hear third party appeals of RCRA and NPDES permits, but nothing suggests that it restricts the Board from hearing third party appeals in other types of cases (particularly considering the catch-all language described above, which clearly anticipates that the Act/Board procedural regulations may authorize the Board to hear cases other than those specifically listed in Section 2175). Because the purpose behind the rules is to provide a broad overview of Board responsibilities, the absence of a similar type of adjudicatory hearing does not speak to the Board's

underlying authority to hear such a matter. It can be noted that the cited rules also do not cite to third party appeals that can be brought under the Clean Air Act Permit Program or CAAPP, but there seems to be little doubt as to the Board's legal authority for hearing such appeals.

The Board may amend the Part 2175 rules to specifically reference PSD as a house-keeping matter if it so chooses, but these amendments are not necessary. The Board's procedural rules, by virtue of this proceeding, will establish the requisite procedures that will govern PSD appeals consistent with the Act's provisions. To the extent that a "conflict" exists between the procedural rules adopted by the Board in this proceeding and the informational rules of Part 2175, the Board's procedural rules will control. See, 2 IAC 2175.100.

- ii. If this is not the case, will IL EPA pursue the appropriate course of action necessary to amend 2 Ill. Adm. Code § 2175.600(a)(2) to accurately reflect the proposed amendments in the immediate proceeding?

No, the Illinois EPA has no plans to amend 2 Ill. Adm. Code 2175.600(a)(2). See, the above response of the Illinois EPA.

2. At page 76 of the Statement of Reasons, Illinois EPA explains that it is not including 40 CFR §52.21(o)(3) in proposed Section 204.1140. "40 CFR [§] 52.21(o)(3) provides the Administrator with the option of requiring visibility monitoring in any Federal Class I area near a proposed new stationary source or major modification as is necessary and appropriate." The provided reasons for not including 40 CFR § 52.21(o)(3) are that: 1) "40 CFR [§] 51.166(p) does not mandate that each applicable state implementation plan submitted to USEPA for review and approval contain such a requirement," and; 2) "no Class I area exists in Illinois, or in close proximity to Illinois."

- a. Why does IL EPA believe that the fact that no Class I areas *currently* exist in Illinois provides support for the proposed action?

The fact that Illinois currently does not have any Class I areas means that the absence of a provision in Part 204 similar to 40 CFR 52.21(o)(3) currently does not have any effects or consequences. Before the absence or presence of such a provision would have any consequences, the State of Illinois would first have to complete the formal process to redesignate an area to Class I. As such, this series of questions speculating on the potential value of requirements for visibility monitoring for any Class I area that might be created by the State of Illinois in the future is pursuing a matter that is not needed for the USEPA to approve a state PSD program for Illinois.

- b. Given that 40 CFR § 52.21(g) explicitly provides States and “Indian Governing Bodies” the authority to redesignate areas as Class I, what relevancy does the current lack of Class I designations have on the potential of future Class I designations?

It is unquestioned that the State of Illinois currently has the legal authority under Section 164(a) of the Clean Air Act to redesignate areas in Illinois from Class II to Class I under the PSD program, subject to the procedural requirements set forth in 40 CFR 52.21(g). Section 204.930(b) would act to confirm this authority. The fact that the State of Illinois has not undertaken any such redesignation does not show that the State does not have this authority. However, as a practical matter, it may be relevant that in the over 35 years that the PSD program has been in existence, the State of Illinois has not redesignated any areas in Illinois to Class I under the PSD program.

- c. As Class I designations most often apply to such lands as U.S. Wilderness Areas, National Parks and Forests, and other Federally-protected lands, given Illinois’ trend of increasing total Federal acreage within its borders (16.5% increase from 1990 to 2015)¹, isn't it possible that the State of Illinois may want to use its authority to designate these lands as Class I in the future?

It is certainly possible that in the future the State of Illinois may elect to redesignate an area in Illinois from Class II to Class I under the PSD program. However, any such area would not be a federal Class I area. As such, even under 40 CFR 52.21(o)(3), the federal PSD rules would not provide for the USEPA to impose requirements for visibility monitoring related to such an area. In this regard, 40 CFR 52.21(o)(3) provides:

Visibility monitoring. The Administrator may require monitoring of visibility in any Federal class I area *near* the proposed new stationary source for [sic] major modification *for such purposes and by such means* as the Administrator deems *necessary and appropriate*. (underlining and italics added for emphasis).

It is also noteworthy that, based on the reference for the data cited with this question, the federal ownership of land in Illinois has not increased significantly over the past 25 years. The percentage of land owned by the federal government in Illinois has risen from 0.99 to 1.15 percent from 1990 to 2015. (The percentage of land not owned by the federal

¹ Carol H. Vincent, Laura A. Hanson & Carla N. Argueta, *Federal Land Ownership : Overview and Data*, 7-5700, at 17 (2017), available at <https://fas.org/sgp/crs/misc/R42346.pdf>.

government changed from 99.01 to 98.85 percent.)²

- d-1. As the goal of the PSD program is to protect public health and welfare from the adverse effects of increased air pollution, isn't Illinois EPA's proposed elimination of the opportunity to require additional air monitoring antithetical to the Clean Air Act at large, and to the PSD program in particular?

This question reflects a flawed understanding of the system of PSD increments established under Section 163 of the Clean Air Act. The purpose of PSD increments is to prevent significant deterioration of air quality. Other elements of the PSD program supplement the provisions of the Clean Air Act whose purpose is to protect public health and welfare from air pollution. These requirements of the Clean Air Act that are directed to protection of public health and welfare include the adoption of national ambient air quality standards by USEPA (Section 108), the general requirements for states to develop State Implementation Plans or SIPs (Section 110), and the specific requirements for SIPs for nonattainment areas (Section 174 through 191).

In contrast, the PSD increment system simply restricts the magnitude of the deterioration in air quality that is allowed for certain pollutants from baseline levels of air quality, with different values for the allowable deterioration based on the designation of the area, i.e., Class I, II or III. While the smallest PSD increments apply for Class I areas, those increments were established to address air quality related values in such areas, not public health or, as that term is commonly understood, human welfare. These air quality related values include protection of specific ecosystems in such an area, particularly as species or ecosystems may be present that are especially particularly sensitive to air quality. These air quality related values may also include protection of scenic vistas or "visibility." The presence of air quality related values in an area that warrant redesignation of an area from Class II to Class I is a matter that is necessarily addressed during the administrative process by which an area may be proposed for redesignation by a state.

- d-2. Hearing Officer Rabczak asked the Agency, "[I]f Illinois redesignates and finally has a Class 1 area, what would be the process to amend this rule in terms of simultaneous proceeding of both? Would there be a gap in time between the redesignation of Class 1 area and amending these rules or would IEPA plan to proceed simultaneously?" 11/27/18 TR at 27.

² At hearing, the Illinois EPA observed that there could be a typographical error in its statement that "The percentage of land not owned by the federal government changed from 99.1 to 98.85 percent." After further review, the Illinois EPA found that a typographical error did exist. The statement should have read that "[t]he percentage of land not owned by the federal government changed from 99.01 to 98.85 percent." *Emphasis added.*

The Agency views this question as a collateral issue to this rulemaking given the State of Illinois has not redesignated any areas in Illinois to Class I under the PSD program in the over 35 years that the PSD program has been in existence. Speculating on the process that the Agency would employ at a hypothetical time in the future is not useful to the present rulemaking. However, it should be understood, that one consequence of a state PSD program is that Board rulemaking will likely be required in the future to revise the State program. When such changes are warranted, the Illinois EPA will appropriately initiate any needed rulemaking proceeding. As sometimes can occur, rulemakings subsequent to the initial creation of a regulatory program can create gaps in time when an existing program continues in effect until the subsequent revisions take effect.

However, in this instance, the creation of any *state* Class I area would not be relevant to the discretion afforded the Administrator in 40 CFR 52.21(o)(3) for *federal* Class I areas.

- d-3. Martine Klein, Attorney Advisor to Board Member Zalewski, asked the Agency, "So in the insinuation there, the implication is if the state reclassifies [an area to a Class I area], it doesn't necessarily mean in order to comply with the Clean Air Act that we would have to amend the PSD program?" 11/27/18 TR at 28.

Correct. As discussed at hearing, if the State of Illinois were to classify an area as a Class I area, it would not be a *federal* Class I area; consequently 40 CFR 52.21(o)(3) would have no bearing to any such classification by the State of Illinois. Moreover, as indicated in the Statement of Reasons, while 40 CFR 52.21(o)(3) provides the Administrator with the option of requiring visibility monitoring in any *federal* Class I area near a proposed new stationary source or major modification as is necessary and appropriate, 40 CFR 51.166(p) does not mandate that each applicable state implementation plan submitted to USEPA for review and approval contain such requirement. (emphasis added). Consequently, the inclusion of language similar to 40 CFR 52.21(o)(3) in proposed Part 204 is not necessary for USEPA approval of Part 204.

- e. If neither Illinois nor the relevant Indian Governing Bodies opt to use their authority to redesignate lands as Class I, is there any cost to preserve the authority found in 40 CFR § 52.21(o)(3)?

There would be several costs or impacts from including a parallel provision to 40 CFR 52.21(o)(3) in Part 204. For example, such a provision would be confusing to applicants for PSD permits as it would suggest that Illinois has Class I areas. Such a provision would suggest that the State of Illinois has

determined that visibility would be an air quality related value in any area that it would redesignate to Class I. Moreover, such a provision would suggest that an applicant for a PSD permit may be required to conduct visibility monitoring in such an area irrespective of whether the applicant can obtain the necessary permit or approval from the body that actually manages the area in which monitoring must be required. Lastly, it would require the Board to elaborate upon the wording of 40 CFR 52.21(o)(3), as it provides for monitoring for visibility “for such purposes,” “by such means” and “as ...necessary and appropriate.”

- f-1. Given the potential for future Class I designations in Illinois, can Illinois EPA articulate any reason for eliminating this potential pollution monitoring mechanism apart from the fact that they are not explicitly required by 40 CFR §51.166(p) to include it?

As already discussed, there are a variety of reasons for not having a parallel provision to 40 CFR 52.21(o)(3) in Part 204 beyond the fact that it is not required by 40 CFR 51.166. Moreover, while visibility may be an air quality related value in certain areas, including mandatory federal Class I areas, monitoring of visibility does not provide direct measurements of the concentrations of pollutants in the atmosphere.

However, if the Board determines that it is appropriate for Part 204 to have a parallel provision to 40 CFR 52.21(o)(3), the Illinois EPA will submit proposed language for such a provision to the Board for its consideration.

- f-2. Mr. Daryl Grable, on behalf of CARE, asked the Agency, “In terms of the implementing statute for Section 91 Part C of the Illinois Environmental Protection Act, is there any portion of that which allows the Illinois EPA to lessen standards? Because I know there is plain language that says they can adopt -- the Board may adopt more stringent additional provisions and explicitly lists Section A, Q, S and T as the parts of 40 CFR Part 52.21 that will not be included -- incorporated by reference.” 11/27/18 TR at 31.

Section 9.1(c) of the Illinois Environmental Protection Act (Act) provides that the regulations adopted by the Board to establish a PSD program shall be consistent with 40 CFR 52.21 except for subsections (a)(1), (q), (s), (t) and (u). The Board is also authorized to adopt more stringent or additional provisions to the extent that it deems appropriate.

In addition, Section 3.363 of the Act established a new definition of “PSD permit” to mean a permit or a portion of a permit for a new major source or major modification that is issued by the Illinois EPA under Section 9.1(c) that has been approved by the USEPA and incorporated into the Illinois SIP to implement Section 165 of the Clean Air Act and 40 CFR 51.166. Given the

interplay between these federal and state law requirements, the Illinois EPA proposed a state PSD program based largely on the language of 40 CFR 52.21 but also ensuring that this program meets the requirements for a SIP submittal to USEPA in 40 CFR 51.166.

In those areas where the language did not mirror the language of 40 CFR 52.21, the legal basis for these changes were discussed in the Statement of Reasons. However, as a general matter, any changes proposed by the Illinois EPA typically sought to memorialize recent court or administrative decisions or USEPA guidance or regulatory proposals. In a few instances, changes were proposed by the Illinois EPA given the timing of a transition provision or an exemption had passed or, in one instance, was deemed not to be necessary (i.e., as previously discussed, if the State of Illinois were to redesignate an area as Class I, it would not be a *federal* Class I area; consequently 40 CFR 52.21(o)(3) would have no relevance for such area as is redesignated to Class I by the State of Illinois).

3. The Agency agreed to respond to CARE Prefiled Question 3 in post-hearing comments (11/27/18 TR at 32-35). CARE asked the Agency:

Under Illinois' existing PSD permitting scheme. USEPA's Environmental Appeals Board ("EAB") is the adjudicatory body governing PSD permitting appeals. As a federal entity, the EAB has acknowledged it has a legal requirement, due to Executive Order 12898, to address and consider environmental justice issues if they are raised as part of a PSD permit appeal. In addition, multiple EAB decisions have held that "a permit issuer should exercise its discretion to examine any 'superficially plausible' claim that a minority or low-income population may be disproportionately affected by a particular facility that is the subject of a PSD permit proceeding."³ Although Illinois EPA has its own established environmental justice policy, the concept of environmental justice is not mentioned in either the proposed Board rules or in Illinois EPA's Statement of Reasons, nor is it a part of established Board precedent.

- a. Can Illinois EPA clarify whether the Board will be required to evaluate the adequacy of Illinois EPA's environmental justice-related permit decisions as part of a PSD permit appeal?

The proposed rules do not require or contemplate administrative review by the Board of the Illinois EPA's implementation of its environmental justice policy. This is because the policy is a statement concerning an agency's internal management (i.e., directing resources towards achieving recognized goals of the policy) and not a formal rule developed from a statutory or regulatory enactment affecting environmental permitting.

³ *In re Avenal Power Center, LLC*, 15 E.A.D. 384, 398 (EAB 2011) (quoting *In re EcoElectrica, L.P.*, 7 E.A.D. 56, 69 n. 17 (EAB 1997)).

b. In the portion of the Statement of Reasons addressing proposed amendments to Part 105 Subpart F, PSD Permit Appeals, beginning on page 88, Illinois EPA relies heavily on established EAB precedent, directly citing more than 20 EAB decisions and justifying a proposed standard of review on the basis that it “has been the same standard of review employed by USEPA’s EAB in its review of any PSD decisions issued by delegated agencies and/or USEPA Regional Offices.”

i. Does Illinois EPA believe that this same logic should apply to the legal relevancy of environmental justice concerns, that, because of their undeniable relevance in EAB PSD adjudications, the same legal relevancy should apply in subsequent Board PSD permit appeals?

No. This is because the rationale offered for the proposed standard of review is distinctly different from the rationale relied upon by the USEPA Environmental Appeals Board (EAB) concerning EJ namely, USEPA’s mandate to implement federal Executive Order 12898. In support of the Illinois EPA’s proposed standard of review before the Board of any PSD permit issued by the Illinois EPA, the Illinois EPA relies heavily upon the statutory language of Section 40.3(a)(2) of the Act providing that any petition filed with the Board requesting review of a PSD permit decision shall:

- (i) Include such facts as necessary to demonstrate that the petitioner is aggrieved or has an interest that is or may be adversely affected;**
- (ii) State the issues proposed for review, citing to the record where those issues were raised or explaining why such issues were not required to be raised during the public comment process; and**
- (iii) Explain why the Agency’s previous response, if any, to those issues is (A) *clearly erroneous* or (B) *an exercise of discretion or an important policy consideration that the Board should, in its discretion, review.***

415 ILCS 5/40.3(a)(2) (emphasis added). This statutory language of Section 40.3(a)(2)(iii) addressing standard of review derives from 40 CFR Part 124. As such, the EAB’s historic interpretation of regulatory language in 40 CFR 124, which largely mirrors the statutory verbiage of Section 40.3(a)(2)(iii) of the Act, is directly on point and relevant.⁴

⁴ Consistent with Section 40.3(a)(2)(iii), review is warranted where the permit decision involves a

Federal authority for environmental justice derives from federal Executive Order 12898, and the role it currently plays in EAB appeals is based on federal agency and/or judicial interpretations of the requirements of that Executive Order. No similar state authority, or statutory or regulatory framework recognizing environmental justice in the context of environmental permitting, exists in Illinois.

- c. Does Illinois EPA believe that States should be permitted to assume control of federal permitting programs for purposes of relaxing legal requirements contained therein?

As an initial matter, the Illinois EPA is not intending to take control of the federal PSD program rather the Illinois EPA, by this rulemaking, is proposing a state PSD program. In proposing this rulemaking to the Board, the Illinois EPA is intending to meet certain obligations of the State of Illinois under the Illinois Environmental Protection Act, which ultimately aims to ensure that the Board adopts regulations establishing a PSD permit program meeting the requirements of Section 165 of the Clean Air Act (CAA), 42 U.S.C. §7475. 415 ILCS 5/9.1(c). The Illinois EPA is not in a position to speculate as to the reasons why States (and their respective legislatures) might desire state implementation of federal permitting programs, or as to the legal adequacy of such reasons.

- d. As allowing for environmental justice concerns to be raised in PSD permit appeals is both legal and practical, is Illinois EPA still “committed to protecting the health of the citizens of Illinois and its environment, and to promoting environmental equity in the administration of its programs to the extent it may do so legally and practicably” as is claimed on its website?⁵

This question is beyond the scope of the present proceeding. Moreover, the question assumes too much, as it does not establish that environmental justice considerations, warranted though they may be in a federal PSD permit appeal because of a federal executive order, are likewise authorized by applicable law in the context of a state-approved PSD program. The question also does not support a conclusion that implementing environmental justice through a state-based permit appeal process, where it lacks a basis in applicable law, is more practical than the approach currently undertaken by agency staff. The Agency supports, and will

“finding of fact or conclusion of law which is clearly erroneous” or where it involves “an exercise of discretion or an important policy consideration.” 40 CFR 124.19(a)(1) and (2).

⁵ Illinois Environmental Protection Agency, Environmental Justice (EJ), Illinois.gov.

<https://www.illinois.gov/enr/peis-environmental-justice/Pages/default.aspx> (last visited November 16th, 2018).

continue to implement, these efforts with regard to its various programs, and the proposed rulemaking in no way diminishes such efforts.

Notwithstanding, the Illinois EPA has a grievance procedure as required under 40 CFR Section 7.90. This procedure can address claims of discrimination or disparate impact as a result of Agency action in the context of Agency decision making including PSD permitting decisions.

- e. Is Illinois EPA of the opinion that eliminating the ability to raise environmental justice concerns in PSD permit appeals is “support[ing] the objectives of achieving environmental equity for all of the citizens of Illinois,” as it purports to do on its website?⁶

This question is beyond the scope of the present proceeding. It can be noted that environmental justice concerns can be raised with the Illinois EPA in numerous settings, including the administration of programs involving state construction and operating permits.

⁶ *Id.*

ILLINOIS ENVIRONMENTAL REGULATORY GROUP

- 1-a. In his Pre-Filed Testimony, Mr. Jason Schnepf states that “[t]he provisions of the proposed rule *generally* mirror the provisions of the existing federal PSD rule at 40 CFR 52.21.” Pre-Filed Testimony of Jason Schnepf, PCB R 19-1, at 3 (Ill. Pol. Control. Bd. Nov. 8, 2018) (emphasis added). Mr. Schnepf also addressed PSD applicability in his Pre-Filed Testimony. Would PSD applicability differ under the proposed Part 204 regulations from PSD applicability under 40 C.F.R. 52.21?

As proposed on July 2, 2018, PSD applicability under proposed Part 204 would not differ from PSD applicability under 40 CFR 52.21. Future changes to the applicability requirements of 40 CFR 52.21 would potentially result in differences in applicability between 40 CFR 52.21 and Part 204.

- 1-b. With regard to future differences between applicability requirements in 40 CFR 52.21 and the applicability requirements in the Agency’s proposed Part 204, LaDonna Driver of Hepler Broom, on behalf of the Illinois Environmental Regulatory Group, asked the Agency, “If those changes to 52.21 happen in the future from what you’re saying, then the Agency and the Board would then consider updates to Part 204 to mirror those?” 11/27/18 TR at 36.

As previously discussed, part of adopting a state PSD program necessarily means that rulemaking will likely be required in the future to make changes to Part 204. When such changes are warranted, the Illinois EPA will appropriately initiate the needed rulemaking proceeding.

- 2-a. Mr. Christopher Romaine addressed the analysis and control requirements of the PSD program in his Pre-Filed Testimony filed on November 8, 2018. Would analysis and control requirements under the proposed Part 204 regulations differ from the corresponding requirements under 40 C.F.R. 52.21?

As proposed, the analysis and control requirements under 40 CFR 52.21 would generally not differ from the analysis and control requirements under proposed Part 204. However, instances exist where Part 204 is superficially more stringent than 40 CFR 52.21. For instance, 35 Ill. Adm. Code 204.280, Best Available Control Technology, and Section 204.1100 Control Technology Review, the Illinois EPA added references to 40 CFR Parts 62 and 63. The definition of “BACT” would now provide that “in no event shall application of BACT result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60, 61, 62 and 63.” This would maintain consistency with the definition of BACT in Section 169(3) of the Clean Air Act, which refers to requirements under Sections 111 or 112 of the Clean Air Act, rather than to Parts of the CFR.

In 35 Ill. Adm. Code 204.860, Exemptions, the Illinois EPA has not proposed to carry over the exemption for pre-construction monitoring for any of the pollutants currently addressed in 40 CFR 52.21(i). USEPA maintains that it has authority to adopt significant monitoring concentrations or SMCs for pollutants other than PM_{2.5}. The adopted SMCs may be used to explicitly exempt an owner or operator of a proposed source or modification from being required to undertake a project-specific pre-construction ambient air quality monitoring analysis to satisfy Section 165(e)(2) of the Clean Air Act. In such circumstances, other appropriate data for existing ambient air quality may be used. In this regard, the ambient monitoring networks operated by state and local agency commonly include ambient monitoring stations that are located at sites that can provide air quality data that is considered representative of the areas in which proposed projects would take place.

In addition, if changes are made to the analysis and control requirements of 40 CFR 52.21 in the future, the analysis and control requirements under 40 CFR 52.21 and Part 204 may differ.

- 2-b. Ms. Driver asked that the Agency, in post-hearing comments, “also respond to the same question I asked Mr. Schnepf was that if the 52.21 provisions are updated in the future, what would be then the procedure for making corresponding updates to Part 204, just the same question as what Mr. Romaine said on the analysis and control requirements?”
11/27/18 TR at 40.

As previously discussed, part of adopting a state PSD program necessarily means that rulemaking will likely be required in the future to make changes to Part 204. When such changes are warranted, the Illinois EPA will appropriately initiate the needed rulemaking proceeding.

3. How many States have State Implementation Plan (“SIP”)-approved PSD programs?

Based on the information that the Illinois EPA could locate online, 46 states have SIP-approved PSD programs. Some states, California, for example, are divided by county or districts, each of which may have varying SIP-approved PSD program status. The entire state of Illinois is addressed by a USEPA-delegated PSD program.

4. How many States have USEPA-delegated PSD programs?

Based on the information that the Illinois could locate online, the status of states with PSD permit programs that are implemented under a USEPA delegation is generally summarized below. This summary does not address areas in these states that are considered Indian Country, for which USEPA is the permitting authority for PSD.

In four states, Hawaii, Illinois, Massachusetts and New Jersey, PSD permitting is currently implemented for the entire state under delegated PSD programs.

In two states, California and Nevada, PSD is currently implemented under a delegated program in certain jurisdictions. In California, which is divided into 35 separate Air Pollution Control or Quality Maintenance Districts, some districts have SIP-approved PSD programs and others have delegated programs.⁷ In Nevada, the local air pollution control authority for Clark County, the county in which Las Vegas is located, implements PSD under a SIP-approved program. For the rest of the state, PSD is implemented under a delegated PSD program.

In Arizona, in three counties (i.e., Maricopa County in which Phoenix is located; Pima County in which Tucson is located, and Pinal County southeast of Phoenix), PSD is implemented under delegated programs. In addition, in the rest of Arizona, PSD permitting for greenhouse gases (GHGs) is currently implemented under a delegation agreement. For pollutants other than GHGs in the rest of Arizona, PSD is implemented under a SIP approved program.

5. Specifically, in USEPA Region V, how many States have SIP-approved PSD programs versus delegated PSD programs?

Of the six states in USEPA Region V, five states currently have SIP-approved PSD programs (Indiana, Michigan, Minnesota, Ohio and Wisconsin). The federal PSD permit program currently applies in Illinois and is administered by the Illinois EPA pursuant to delegation agreement between the Illinois EPA and USEPA.

6. In Illinois EPA's Statement of Reasons filed in this matter, Illinois EPA mentions a separate rulemaking to amend 35 Ill. Adm. Code 252, Public Participation in the Air Pollution Control Permit Program, "to accommodate a SIP-approved PSD program in Illinois." *See* Statement of Reasons, PCB R 19-1, at 3, 28 (Ill. Pol. Control. Bd. July 2, 2018). What are Illinois EPA's plans for that rulemaking?

The Illinois EPA intends to propose Agency regulations addressing a state-based PSD program. While a specific schedule has not yet been developed, the Illinois EPA tentatively plans to have revisions to Part 252 finalized shortly after the completion of this Board rulemaking.

⁷ For instance, the Bay Area Air Quality Management District in which San Francisco is located is SIP-approved. The South Coast Air Quality Management District, in which Los Angeles is located, is delegated.

POLLUTION CONTROL BOARD**General Questions**

- 1-a. Please explain if IEPA hosted a stakeholder process in developing the proposed rule. If so, please provide the list of stakeholders that participated in that process.

During the development of this proposal, the Illinois EPA met with representatives from sources potentially subject to Part 204. In addition, given the language proposed to address the distinction between administrative matters reviewed by the Board and administrative actions taken by the Illinois EPA and the Office of the Illinois State Fire Marshal (OSFM), the Illinois EPA provided a draft of proposed Parts 101 and 105 to the OSFM. Subsequent discussions were held between counsel for the Illinois EPA and the OSFM.

On October 2, 2017, the Illinois EPA posted online a draft of these proposed regulations, including Part 204 and proposed amendments to Part 101 and 105. The Illinois EPA also notified public interest groups and other interested individuals of these proposed regulations, soliciting comments on the draft proposal. The Illinois EPA also engaged in outreach on this proposal with USEPA providing this proposal to USEPA, Region 5 for preliminary review and comment.

The stakeholders that participated in the process were as follows:

- **USEPA**
- **Representatives of Illinois Environmental Regulatory Group**
- **Sierra Club**
- **Environmental Law & Policy Center**
- **Trinity Consultants**

- 1-b. Regarding the Agency's outreach efforts, Mr. Grable on behalf of CARE asked the Agency, "Can Illinois EPA state why they didn't do any consultation with the Illinois Environmental Justice Commission or a reason for not doing so?" 11/27/18 TR at 45.

The Illinois EPA did consult with the Illinois Environmental Justice Commission (Commission) on Wednesday, October 4, 2017. During this meeting, the Illinois EPA informed the participants that the Illinois EPA had historically administered the PSD program in Illinois by means of a delegation agreement with USEPA. Consistent with statutory changes to the Illinois Environmental Protection Act requiring the Illinois Pollution Control Board to establish a state PSD program, the Agency would be submitting a regulatory package to the Board to create such program. The Illinois EPA further informed the Commission that the regulatory proposal was at public outreach; the outreach period would be ending on November 1, 2017. Questions followed by those in attendance. In fact, a question was posed by Commissioner Keith Harley from the Chicago Legal Clinic, the same legal clinic that represents CARE, regarding the related changes that are planned to Agency

rules addressing procedures for public participation in air pollution control permitting, 35 Ill. Adm. Code Part 252.

- 1-c. Board Member Zalewski asked the Agency, “When you say outreach, when the initial outreach incurred [sic], did you just post it on your website? What is the typical way of reaching out to different organizations?” 11/27/18 TR at 45-46.

In addition to posting the proposed regulatory proposal on the Illinois EPA’s website and discussing the matter at the Illinois Environmental Justice Commission, the Illinois EPA directly notified the USEPA and various organizations, groups and/or individuals that have requested to be notified of proposed air rulemakings. Finally, in conjunction with the posting of the proposed regulatory proposal on the Illinois EPA’s website and the direct notifications mentioned above, the Illinois EPA provided a plain language fact sheet that accompanied these notifications for what would otherwise be a complex rulemaking for members of the public.

2. IEPA indicates that 40 CFR 51.166 addresses regulations governing state PSD programs established pursuant to state law and submitted to USEPA for approval and incorporation into SIP while 40 CFR 52.21 governs federal PSD programs and applies in those states without a SIP-approved PSD program. SR at 7-8. The Board notes that Section 9.1(c) of the Environmental Protection Act (Act) directs the Board to incorporate 40 CFR 52.21 by reference in its regulations to establish a PSD program. 415 ILCS 5/9.1(c).

IEPA’s proposal for a state PSD program, however, is based on 40 CFR 52.21, and not 40 CFR 51.166. SR at 28. For the clarity of the record, please explain why.

First, it is important to note that while the role of 40 CFR 51.166 and 52.21 are different, they both deal with the same substantive programs. In fact, while based mainly on 40 CFR 52.21, the Illinois EPA also considered 40 CFR 51.166 during the development of the proposed regulations. As clearly explained in the Statement of Reasons:

Given the interplay between these federal and state law requirements, the Illinois EPA is proposing a state PSD program based largely on the language of 40 CFR 52.21 but also ensuring that this program meets the requirements for a SIP submittal to USEPA in 40 CFR 51.166.

Statement of Reasons at pages 29-30 (emphasis added).

Please also explain:

- a. Is it IEPA’s interpretation of Section 9.1(c) of the Act that the Board rules must be modeled on 40 CFR 52.21, rather than incorporated by reference?

Correct, the appropriate interpretation of Section 9.1(c) is that the Board

rules must be modeled on 40 CFR 52.21 rather than merely incorporated by reference. While Section 9.1(c) of the Act does employ the phrase “incorporate by reference” when discussing the establishment of a PSD program by the Board, the definition of “PSD permit” in Section 3.363 means a permit or a portion of a permit for a new major source or major modification that is issued by the Illinois EPA under Section 9.1(c) that has been approved by the USEPA and incorporated into the Illinois SIP to implement Section 165 of the Clean Air Act and 40 CFR 51.166. (emphasis added). Given the nature of these two sets of federal rules, it is not possible to simply incorporate 40 CFR 52.21 to serve as a state PSD program. (Note that the main differences between 40 CFR 51.166 and 40 CFR 52.21 relevant to this proposal are set forth in the following response to Question 2b). Instead, consistent with the language of Section 9.1(c) of the Act and Section 3.363 of the Act, the Illinois EPA proposed a state PSD program based largely on the language of 40 CFR 52.21 but also ensuring that this program meets the requirements for a SIP submittal to USEPA in 40 CFR 51.166.

Moreover, as a practical matter, implementation of the PSD permitting program by means of an incorporated rule would be challenging. At a basic level, 40 CFR 52.21 was not developed by USEPA so that it could be readily incorporated by reference by a state or local governmental body. One cannot simply declare that, as matter of state regulations, 40 CFR 52.21 applies in Illinois with the substitution of the “Illinois EPA” in place of the “Administrator of USEPA.” There are provisions in 40 CFR 52.21 for which the Illinois EPA cannot substitute for USEPA. For example, the opening paragraph of the definition of “subject to regulation,” 40 CFR 52.21(b)(49), specifically refers to regulatory actions by USEPA. In addition, this paragraph includes internal references to the Code of Federal Regulations.

40 CFR 52.21(b)(49) Subject to regulation means, for any air pollutant, that the pollutant is subject to either a provision in the Clean Air Act, or a nationally-applicable regulation codified by *the Administrator in subchapter C of this chapter*, that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity...(emphasis added)

USEPA also has not updated 40 CFR 52.21 to respond to certain federal court decisions that are relevant to implementation of the PSD permit program. For example, as will be discussed further in response to another question, 40 CFR 52.21(b)(4), the definition for “potential to emit,” still provides that a limitation must be “federally enforceable” or enforceable by the USEPA to restrict a source’s potential to emit a pollutant. However, as USEPA has recognized in a memorandum, a

limitation that is only enforceable by a state or local air permitting authority can now also serve to restrict a source's potential emissions.

In addition, as provided by 40 CFR 52.01, 40 CFR 52.21 relies on definition of certain terms that are in 40 CFR 51.100. These definitions are essential for proper implementation of the PSD permitting program.

The consequence of circumstances such as these is that even if Illinois incorporated provisions of 40 CFR 52.21 by reference, a detailed state rule would still have to be adopted setting forth the various adjustments to the text of 40 CFR 52.21 necessary for a USEPA-approved state PSD permit program. The development and subsequent implementation of a single, comprehensive state PSD rule will be far simpler for the Board, the Illinois EPA and the Office of the Attorney General.

- b. **What are the main differences between 40 CFR 51.166 and 40 CFR 52.21 relevant to this proposal?**

The main difference between 40 CFR 51.166 and 40 CFR 52.21 involves their function. The regulatory guidance for state PSD programs established pursuant to state law and approved by USEPA for incorporation into state SIPs is codified at 40 CFR 51.166. In these SIP-approved state PSD programs, the relevant permitting authority that issues PSD permits is the state or local air pollution control authority. Meanwhile, the regulations for the federal PSD program are set forth at 40 CFR 52.21. These regulations directly apply in those states without a SIP-approved PSD program. In these circumstances, the USEPA is the permitting authority. However, a state or local permitting agency typically enters into a delegation agreement with USEPA to process PSD permit applications on behalf of USEPA for proposed projects that would occur within their area of jurisdiction.

As such, an obvious difference between 40 CFR 52.21 and 51.166 would be the administrative tribunal that would be responsible for hearing appeals of any permitting decision. A PSD permit issued or denied by the Illinois EPA under 40 CFR 52.21 has been and is currently subject to review by USEPA's Environmental Appeals Board (EAB) in accordance with 40 CFR 124.19. As addressed by Section 124.19, the EAB's review of PSD permitting actions is limited to PSD permits issued or denied by the USEPA or delegated agencies; Part 124 does not apply to PSD permits issued or denied under a SIP-approved PSD program. *In re Zion Energy, LLC*, 9 E.A.D. 701, 701-702, fn.1 (EAB 2001); *see also, In re Dominion Energy Brayton Point, LLC*, PSD Appeal No. 09-01, slip op. at 2-3 (May 13, 2009) ("The . . . [EAB's] jurisdiction to review PSD permit

extends only to those issues relating to permit conditions that implement the federal PSD program.”). However, once the state of Illinois has its own SIP-approved PSD program, PSD permits issued or denied by the Illinois EPA will be subject to Board review consistent with the procedural requirements of Section 40.3 of the Act, 415 ILCS 5/40.3 and 35 Ill. Adm. Code Parts 101 and 105.

Some of the notable substantive differences between the requirements of 40 CFR 51.166 and 40 CFR 52.21 relevant to this proposal include the following:

- To address an administrative action by the Agency that is to accompany the processing of PSD permit applications as specified by 40 CFR 51.166(q)(1), the Illinois EPA is proposing language requiring the Agency to notify the applicant within 30 days of receipt of an application for a permit pursuant to this Part as to the completeness of or deficiency in the application. Such a requirement is not present in 40 CFR 52.21.**
- To address an administrative action by the Agency that is to accompany the processing of PSD permit applications pursuant to Section 165(d)(1) of the CAA and 40 CFR 51.166(p), the Illinois EPA is proposing language in Section 204.1310 requiring the Agency to provide to the USEPA a copy of each application for a PSD permit that it receives. Such a requirement is not present in 40 CFR 52.21.**
- To address the public participation requirements that must accompany the processing of PSD permits as provided by 40 CFR 51.166(q), the Illinois EPA is proposing similar language in Section 204.1320. Proposed Section 204.1320 would reference the Illinois EPA’s public participation procedures at 35 Ill. Adm. Code Part 252 that the Illinois EPA is currently amending to accommodate a SIP-approved PSD program in Illinois. The federal PSD program at 40 CFR 52.21 generally makes use of the public participation requirements of 40 CFR Part 124.**
- The definition of “secondary emissions” in Section 204.650 would depart from USEPA’s definition in 40 CFR 52.21(b)(18) in two respects. First, the Illinois EPA is proposing four additional criteria for secondary emissions in Section 204.650. (i.e., specific, well defined, quantifiable, and impacting the same general area as the proposed source). These four criteria are present in the definition of “secondary emissions” in 40 CFR 51.166(b)(18). Second, the Illinois EPA is proposing to not include language in the definition of “secondary emissions” set forth in 40 CFR 52.21(b)(18)(i) and (ii). This wording is duplicative of the language included in the first paragraph of 40 CFR 52.21(b)(18). It is noteworthy that the USEPA did not include this extraneous language in the definition of “secondary emissions” in its regulatory requirement for state**

implementation plans to prevent significant deterioration of air quality. 40 CFR 51.166(b)(18).

- As previously discussed, 40 CFR 52.21(o)(3) provides the Administrator with the option of requiring visibility monitoring in any *Federal Class I* area near a proposed new stationary source or major modification as is *necessary and appropriate*. (Emphasis added). 40 CFR 51.166(p) does not mandate that each applicable state implementation plan submitted to USEPA for review and approval contain such requirement.
- c. Will modelling Board rules on 40 CFR 52.21, instead of 40 CFR 51.166, impact USEPA's approval of the Illinois SIP?

Again, as clearly reflected in the Statement of Reasons, the Illinois EPA has worked to ensure this proposal addresses both 40 CFR 51.166 and 52.21. As previously stated by the Illinois EPA in the Statement of Reasons:

Given the interplay between these federal and state law requirements, the Illinois EPA is proposing a state PSD program based largely on the language of 40 CFR 52.21 but also ensuring that this program meets the requirements for a SIP submittal to USEPA in 40 CFR 51.166.

Statement of Reasons at pages 29-30 (emphasis added).

In addition, the Illinois EPA engaged in outreach on this proposal with USEPA to further facilitate SIP approval of Part 204 by USEPA. To the extent that changes are made to proposed Part 204 or accompanying regulations in this rulemaking process, these changes would affect USEPA's approval of Part 204.

3. Section 9.1(c) of the Act (415 ILCS 5/9.1(c)) provides that "the Board may adopt more stringent or additional provisions to the extent it deems it appropriate" and "[n]othing in [Section 9.1(c)] shall be construed to limit . . . the authority of the Board to adopt elements of a PSD permit program that are more stringent than those contained in 40 CFR 52.21."
- a-1. Please identify all provisions in IEPA's proposal that are additional to or more stringent than those contained in 40 CFR 52.21.

In the Statement of Reasons, particularly pages 28 through 85, the Illinois EPA detailed at length those areas where the language in proposed Part 204 does not mirror the language of 40 CFR 52.21. The legal basis for these differences is also discussed. The Illinois would generally refer the Board to

this portion of the Statement of Reasons for a detailed response to this question.

By way of a summary of those differences between 40 CFR 52.21 and proposed Part 204, as was discussed in the Agency's response to Board Question 2(b), certain provisions in Proposed Part 204 are not based on provisions in 40 CFR 52.21 but are based on provisions in 40 CFR 51.166. For example, for a state PSD program to be approvable by USEPA, 40 CFR 51.166(q)(1) provides that the program must require the permitting authority to notify applicants for PSD permits within 30 days if their applications are complete or deficient. Accordingly, Section 204.1300 was included in the Agency's proposal to address this procedural requirement placed on the Agency that is not contained in 40 CFR 52.21.

Certain provisions in proposed Part 204 recognize that the USEPA has not updated 40 CFR 52.21 to keep it current. "Additions" were proposed so that Part 204 would be up-to-date. For example, in Section 204.480, Best Available Control Technology, and Section 204.1100, Control Technology Review, the Agency's proposal refers to limitations under 40 CFR Parts 62 and 63, as well as to limitations under 40 CFR Parts 60 and 61. With this addition, the definition of BACT would provide that "in no event shall the application of BACT result in emissions of any pollutants which would exceed the emissions allowed by any applicable standards under 40 CFR Parts 60, 61, 62 and 63." This would maintain consistency with the definition of BACT in Section 169(3) of the Clean Air Act, which, in the relevant provision, refers to requirements under Section 111 or 112 of the Clean Air Act, rather than to specific parts of the CFR.

Certain provisions in 40 CFR 52.21 are not proposed to be included in Part 204 because they will not be relevant to the actual implementation of Part 204. As these provisions are present in 40 CFR 52.21, they address the past or historical implementation of the requirements of the PSD program. As such, it would not be appropriate to include these provisions in Part 204. (When determining what provisions of the PSD program were in effect while 40 CFR 52.21 was applicable in Illinois, one would need to actually refer back to 40 CFR 52.21, as would be appropriate.) For example, various provisions of 40 CFR 52.21(i), Exemptions, would not be included in Section 204.860, Exemptions. This is because those provisions address exemptions from certain requirements under 40 CFR 52.21 when "new" requirements were adopted or other changes occurred that affected what would be needed to comply with applicable requirements. For example, the exemption in 40 CFR 52.21(i)(11) is not proposed to be included in Part 204. This exemption provides that, as related to the revised NAAQS for ozone published on October 26, 2015, a source impact analysis addressing this revised NAAQS for ozone is not required when a PSD application was determined to be complete on or before October 1, 2015, or a preliminary determination or a draft permit is published before December 28, 2015. This exemption would not be relevant for future PSD applications submitted under Part 204.

Similarly, a provision in 40 CFR 52.21(b)(2) addressing the reactivation of a “very clean coal-fired utility generating unit” is not proposed to be included in Section 204.490, the definition of “Major Modification.” This is because this provision addresses coal-fired utility generating units equipped with a scrubber prior to November 1990 (the enactment of the 1990 Clean Air Act Amendments) that was not operating in the two year period prior to November 1990. There is not a utility generating unit in Illinois for which this provision could be applicable.

Some of the provisions in 40 CFR 52.21 that are not proposed to be included in Part 204 have been stayed. While the text of these provisions is included in 40 CFR 52.21, it is followed by notes indicating the presence of the stays. For example, 40 CFR 52.21(y), the “Equipment replacement provision,” was stayed indefinitely by a court order on December 24, 2003. While the note in 40 CFR 52.21 addressing the stay of this provision also states that this provision would become effective if the court ends the stay, Part 204 cannot include a note with a similar provision. This is because it would improperly circumvent Board rulemaking as related to this provision.

Finally, certain provisions in 40 CFR 52.21 are not proposed to be included in Part 204 because a federal court has found them to be contrary to the requirements of the Clean Air Act. In particular, in Section 204.860, Exemptions, the Illinois EPA has not proposed to carry over the exemption in 40 CFR 52.21(i)(5) from pre-construction ambient air quality monitoring. On its face, 40 CFR 52.21(i)(5), would allow an applicant for a PSD permit for a proposed major new stationary source or major modification to be exempted from the requirement to conduct pre-construction ambient air quality monitoring for a pollutant to meet the requirement for an air quality analysis in 40 CFR 52.21(m)(1).⁸ As related to such ambient air quality monitoring, 40 CFR 52.21(i)(5) provides that if the modeled impacts of a proposed project for a pollutant are below the specified significant monitoring concentration (SMC), the USEPA may exempt a permit applicant from the requirement to conduct such ambient monitoring. 45 Fed. Reg. 52676, 52710 (August 7, 1980). The appeal of this provision occurred many years after it was initially adopted, when USEPA revised 40 CFR 52.21(i)(5) to include a SMC for PM_{2.5}. 72 Fed. Reg. 54112, 54138-42 (September 21, 2007). In January 2013, the U.S. Court of Appeals for the D.C. Circuit

⁸ 40 CFR 52.21(m)(ii) provides that for a pollutant for which there is not a NAAQS, the required air quality analysis shall include such air quality monitoring data as the USEPA determines is necessary to assess ambient air quality for that pollutant in the areas that the emissions of the proposed project would affect. 40 CFR 52.21(m)(iii) provides that for a pollutant for which there is a NAAQS, the required air quality analysis shall include continuous air quality monitoring data to determine whether emissions of the pollutants would cause or contribute to a violation of that NAAQS or an applicable PSD increment. 40 CFR 52.21(m)(iv) provides that such monitoring data shall be collected over a year unless the USEPA determines that a “complete and adequate analysis” can be made with data collected over a shorter period, which period shall be at least four months.

subsequently vacated the portion of the 40 CFR 52.21(i)(5) pertaining to PM_{2.5}. It found that USEPA lacked *de minimis* authority to promulgate an SMC for PM_{2.5} that could be used to explicitly exempt an applicant for a PSD permit that would address PM_{2.5} from undertaking the pre-construction ambient air quality monitoring specifically provided for under Section 165(e)(2) of the Clean Air Act. *Sierra Club v. Environmental Protection Agency*, No. 10-1413 (D.C. Cir. January 22, 2013). However, The D.C. Circuit also stated that “[g]iven how extraordinarily rigidly Congress stated its monitoring mandate is in §165(e)(2), we are not persuaded by the EPA’s arguments that it has *de minimis* authority to exempt the preconstruction monitoring requirement.” *Id.*⁹ While the D.C. Circuit ruling only addressed the use of SMCs for PM_{2.5} and did not address the use of SMCs for other regulated pollutants, the court’s opinion is clear. 40 CFR 52.21(i)(5) is contrary to the Clean Air Act as Section 165(e)(2) requires a PSD permit application to include continuous air quality monitoring data. As such, the inclusion of a provision similar to 40 CFR 52.21(i)(5) in Part 204 would threaten the ability of USEPA to ultimately approve Part 204 as part of Illinois’ SIP.¹⁰ As 40 CFR 52.21(i)(5) also addresses ambient air quality monitoring for fluorides, total reduced sulfur, hydrogen sulfide and reduced sulfur compounds, the Illinois EPA is also proposing to not carry over this explicit exemption for preconstruction ambient air quality monitoring. While the court’s opinion did not address these pollutants, the need for preconstruction monitoring for non-criteria pollutants is to be based on the judgment of the Administrator of USEPA. An exemption from preconstruction monitoring for these four pollutants is not necessary and could also be found to be improper.

- a-2. Mr. Grable asked the Agency, “[C]an Illinois EPA also identify all provisions of the proposal that are less stringent or complete omissions than those contained in

⁹ Clean Air Act, Section 165(e): Analysis; Continuous air quality monitoring data; Regulations; Model adjustments. . . (2) Effective one year after August 7, 1977, the analysis required by this subsection shall include continuous air quality monitoring data gathered for purposes of determining whether emissions from such facility will exceed the maximum allowable increases or the maximum allowable concentration permitted under this part. Such data shall be gathered over a period of one calendar year preceding the date of application for a permit under this part unless the State, in accordance with regulations promulgated by the Administrator, determines that a complete and adequate analysis for such purposes may be accomplished in a shorter period. The results of such analysis shall be available at the time of the public hearing on the application for such permit.

¹⁰ In response to the court’s decision, the USEPA indicated that it will not waive the requirement for pre-construction ambient air quality data for PM_{2.5}. However, applicants for PSD permits can continue to rely on data from the existing monitoring networks so long as the permitting authority finds the data to be representative of the air quality in the area of concern. *Circuit Court Decision on PM_{2.5} Significant Impact Levels and Significant Monitoring Concentration, Questions and Answers*, USEPA, Office of Air Quality Planning and Standards, March 4, 2013.

40 CFR 52.21?" 11/27/18 TR at 56.

As discussed at length at hearing, the Illinois EPA is proposing to not include a provision adapted from 40 CFR 52.21(o)(3) in Part 204. 40 CFR 52.21(o)(3) provides the Administrator with the option of requiring visibility monitoring in any Federal Class I area near a proposed new stationary source or major modification for such purposes and by such means as deemed necessary and appropriate. This provision addresses an action that USEPA may have the authority to take as it is the federal agency. 40 CFR 51.166(p) does not mandate that state PSD permit programs submitted to USEPA for SIP approval contain such requirement. The provision is not accompanied by provisions explaining the circumstances in which such monitoring would be appropriate. Moreover, given no Class I area exists in Illinois, or in close proximity to Illinois, such monitoring would not be needed.

As related to other provisions of the proposal, the Agency would generally direct the participants to the Statement of Reasons, particularly pages 28 through 85, wherein the Agency previously detailed at length those areas where the language in proposed Part 204 does not mirror the language of 40 CFR 52.21 and the basis for these changes. This necessarily includes requirements of 40 CFR 52.21 that have been indefinitely stayed by the D.C. Circuit Court of Appeals such as provisions for routine maintenance, repair and replacement involving "equipment replacement§" in 40 CFR 52.21(cc). Such additional areas that could be characterized as an omission of the provisions contained in 40 CFR 52.21 include the following. As explained, these "omissions" would not result in Part 204 being materially less stringent than 40 CFR 52.21 as it currently applies in Illinois.

- The Illinois EPA is not proposing to include 40 CFR 52.21(b)(2)(iii)(k) which identifies "[t]he reactivation of a very clean coal-fired electric utility steam generating unit" as an activity that would not be considered a modification of a source for purposes of PSD, i.e., a physical change or change in the method of operation. The Illinois EPA is also not proposing to include the definition of "Reactivation of a very clean coal-fired electric utility steam generating unit" of 40 CFR 52.21(b)(38) in Part 204. This is because at this time, in 2018, there are no existing utility units in Illinois to which these provisions could apply. This definition only applies for the reactivation of units that not been in operation for a period of two years before November 15, 1990, when the Clean Air Act Amendments of 1990 were adopted. The unit also had to have SO₂ control with at least 85 percent efficiency. Since it is not possible for such a unit to now be present in Illinois, it does not make sense to include this obsolete exception in the definition of "major modification" in Section 204.490.

- In Section 204.610, the Illinois EPA is proposing a definition of “regulated NSR pollutant” that differs from 40 CFR 52.21(b)(50)(v) in that it expressly excludes any hazardous air pollutants as is provided by Section 112(b)(6) of the CAA. Given the prohibition of Section 112(b)(6) of the CAA stating that PSD shall not apply to pollutants listed under Section 112, hazardous air pollutants listed in Section 112(b)(1) of the CAA, hazardous air pollutants added to the list pursuant to Section 112(b)(3) of the CAA and hazardous substances listed under Section 112(r)(3) for purposes of risk management planning and otherwise not delisted pursuant to Section 112(r) of the CAA should not be addressed as a regulated air pollutant under PSD unless otherwise regulated as an NSR pollutant. 42 U.S.C. §7412(b)(6). However, in 40 CFR 52.21(b)(50)(v), USEPA did not address the treatment of certain listed hazardous air pollutants. If this change were not made, certain substances that are only regulated under Section 112(r)(3) of the CAA, *e.g.*, nitric acid, could be inappropriately considered regulated PSD pollutants under Part 204.
- The Illinois EPA is proposing to not include language in the definition of “secondary emissions” set forth in 40 CFR 52.21(b)(18)(i) and (ii). This wording is duplicative of the language included in the first paragraph of 40 CFR 52.21(b)(18); the repetition in subsequent paragraphs makes little sense. It is noteworthy that the USEPA did not include this extraneous language in the definition of “secondary emissions” in its regulatory requirement for state implementation plans to prevent significant deterioration of air quality. 40 CFR 51.166(b)(18).
- The Illinois EPA proposing to not include all of the exemptions from the substantive requirements of PSD permitting that are currently set forth in 40 CFR 52.21(i). Only the exemptions that will be relevant for the implementation of PSD permitting in the future, under Part 204, are included. For further detail, the Illinois EPA would direct the parties to pages 70 through 73 of the Agency’s Statement of Reasons.
- The Illinois EPA not proposing to expressly exclude nonmethane hydrocarbons from the required air quality analysis that must be submitted as part of a PSD permit application for a pollutant as currently provided by 40 CFR 52.21(m)(1)(iii). This provision provides that the air quality analysis must contain continuous air quality monitoring data for the pollutant if a NAAQS exists for the pollutant, except if the pollutant is nonmethane hydrocarbons. In Section 204.1130, it is not necessary to explicitly exclude nonmethane hydrocarbons from this requirement. This is because there is no longer a NAAQS for nonmethane hydrocarbons so an explicit

exclusion from such monitoring is no longer needed.

- The Illinois EPA is also proposing not to include certain provisions related to air quality monitoring data in 40 CFR 52.21(m)(1)(v) and (vii). This is because these requirements would only be applicable for complete applications submitted in certain periods. (*i.e.*, between June 8, 1981 and February 9, 1982, and between December 1, 1998 and August 1, 1989). Given these periods have passed, and the submittal of complete applications between these dates is no longer possible, the Illinois EPA is proposing to not include these requirements.
- The Illinois EPA is also proposing to not include a provision related to air quality monitoring in 40 CFR 52.21(m)(1)(viii). This provision addresses monitoring of PM₁₀ under 40 CFR 52.21(i)(11)(i) and (ii) and provides that any monitoring method used must have been approved by the Administrator. It further provides that any estimate of the ambient concentrations of PM₁₀ is required to utilize data collected by the approved monitoring method consistent with estimating procedures approved by the Administrator. However, the reference to 40 CFR 52.21(i)(11)(i) and (ii) in 40 CFR 52.21(m)(1)(viii) is not correct given the former addresses PM_{2.5} and the latter speaks to PM₁₀. This typographical error originated in December 2002 when USEPA adopted NSR reform. In that rulemaking, USEPA renumbered paragraphs in 40 CFR 52.21(i) due to its removal of paragraphs (i)(1), (i)(2) and (i)(3). Paragraph (i)(11) became paragraph (i)(8) but the reference in 40 CFR 52.21(m)(1)(viii) to paragraph (i)(11) was not corrected. *See*, 67 Fed. Reg. 80186, 80274 (December 2002). As the Agency is not proposing that Section 204.860 include 40 CFR 52.21(i)(8), the reference to 40 CFR 52.21(i)(8) in Section 204.1130 is unnecessary. As discussed in the Statement of Reasons, given the Agency is not proposing to include the exemption provided by 40 CFR 52.21(i)(8) as it only applied to applications filed before June 1, 1988 or December 1, 1988, there is no need to include provisions of air quality monitoring for a section of 40 CFR 52.21 not proposed for inclusion in Part 204.
- In Section 204.1680, the Illinois EPA is proposing to not include portions of the definition of “major emissions unit” for PALs specific to nonattainment areas. This is because Part 204 solely deals with attainment areas. *See*, 40 CFR 52.21(aa)(2)(iv). At the time USEPA initially promulgated regulations for PALs, USEPA included one set of regulatory language for permitting under both Parts C and D of Title I of the CAA, *i.e.*, both PSD and nonattainment area permitting. 67 Fed. Reg. 80186 (December 31, 2002). Likely for ease of rulemaking, USEPA utilized the same PAL language for both

regulatory programs. Rather than including this artifact of USEPA's drafting in Part 204, the Illinois EPA is proposing a definition of "major emissions unit" specific to PALs under the PSD program.

- The Illinois EPA is proposing to not include the transitional requirement from 40 CFR 52.21(w)(15)(ii) for PALs. 40 CFR 52.21(aa)(15)(ii) provides that a PAL established prior to March 3, 2003 may be superseded by a PAL that meets the federal requirements for PALs in 40 CFR 52.21(aa). Given no PAL has been established in Illinois, this language would be superfluous.**
- The Illinois EPA is proposing to not include a definition of "pollution prevention." 40 CFR 52.21(b)(39) defines the term "pollution prevention" but this term is no longer used elsewhere in 40 CFR 52.21. This term was used in the "Clean Unit Provision" of the federal PSD program, which was struck down by *New York v. EPA*, 413 F.3d 3, 38-39 (D.C. Cir. 2005). Given this term is no longer used in 40 CFR 52.21, the Illinois EPA is not proposing its inclusion in Part 204.**

Finally, the Illinois EPA is not proposing the inclusion of plan disapproval set forth in 40 CFR 52.21(a)(1), public participation in 40 CFR 52.21(q), environmental impact statements included in 40 CFR 52.21(s), disputed permits or redesignations set forth in 40 CFR 52.21(t) and delegation of authority in 40 CFR 52.21(u) consistent with Section 9.1(c) of the Act, 415 ILCS 5/9.1(c).

- a-3. Mr. Grable asked the Agency, "Can Illinois EPA identify the authority granted to them in the plain language of Section 9.1(c) of the Illinois Environmental Protection Act to adopt less stringent or omit entirely provisions contained in 40 CFR Part 52.21?" 11/27/18 TR at 56-57.

As previously discussed, consistent with the language of Sections 9.1(c) and 3.363 of the Act, the Illinois EPA proposed a state PSD program based largely on the language of 40 CFR 52.21 but also ensuring that this program meets the requirements for SIP approval by USEPA in 40 CFR 51.166. That being said, in those instances where the language of proposed Part 204 does not mirror the language of 40 CFR 52.21, the legal basis for these differences were generally discussed in the Statement of Reasons. However, as a general matter, these differences are not intended to reduce the stringency of Part 204 compared to 40 CFR 52.21. Indeed, proposed Part 204 would arguably be more stringent than 40 CFR 52.21 as it would memorialize recent court or administrative decisions or USEPA guidance or regulatory proposals.

Any such "omissions" as identified above in response to Board Question 3(a-2), were proposed by the Illinois EPA given the provision was obsolete,

duplicative or extraneous, inconsistent with the federal Clean Air Act, or a drafting artifact specific to nonattainment areas. In one instance, as previously discussed, a requirement for visibility monitoring in federal Class I area was deemed not to be necessary.

- a-4. Mr. Grable asked the Agency, “Can Illinois EPA please address the discrepancy that exists where proposed Section 204.600 Incorporations By Reference claims that the - quote, the following materials are incorporated by reference? These incorporations do not include any later amendments or additions, end quote, and then proceeds to amend -- or proceeds to list 40 CFR 52 as one of these sections that is not amended in a later edition and -- but then later proceeds to go on and provide an amendment to 52.21 in the proposed rule.” 11/27/18 TR at 57.

Mr. Grable rephrased the questions at the Agency’s request as follows, “So in part – proposed Section 204.100 Incorporation by Reference . . . One of the sections listed is 40 CFR Part 52. . . So in that section, those are the lists of incorporations by reference that do not include any later amendments or additions and then later on in the proposed regulations 40 CFR Part 52 is getting an amendment or an omission as for one part of it and I would like an explanation for the discrepancy.”

Mr. Grable further followed up by stating that, “The later provision is the section where I was referring to earlier where you omit the 52.21(o)(3) from the proposed regulations entirely.”

In Section 204.100, the entirety of 40 CFR 52.21 is incorporated by reference as this incorporation is relevant to where “40 CFR 52.21” is referred to in the proposed rules. For example, Section 204.400, the definition of “Federally Enforceable” refers to “. . . any permit requirements established pursuant to 40 CFR 52.21. . .”

This comment reflects a misunderstanding of proposed Section 204.100, Incorporations by Reference, that appropriately incorporates the federal regulations referenced in Part 204. See, 5 ILCS 100/5-75. In large part, the regulations incorporated by reference address the reference to 40 Parts 50 through 99 in Section 204.700, Subject to Regulation. In addition, the incorporation of 40 CFR 52.21 is necessary given its additional reference in Sections 204.240, 204.420, 204.490, 204.520, 204.550, 204.640, 204.860 and 204.1340 as well as Section 204.400. The incorporation of these provisions, specifically 40 CFR 52.21, does not mean that the Illinois EPA is proposing the substantive adoption of these federal regulations as a matter of State law for inclusion in the SIP as suggested by this comment. Rather the Illinois EPA is proposing the adoption of proposed Part 204, Prevention of Significant Deterioration, as a matter of State law for inclusion in Illinois’ SIP.

- a-5. Board Member Zalewski asked the Agency, “Just a quick follow-up to hammer it

home. I think this has been answered, but I just want to make sure it's clear on the record. 3A you said that IEPA's proposal is superficially more stringent, but your testimony is that in practice it is not more stringent, is that accurate?" 11/27/18 TR at 59-60.

As discussed in response to other questions, the Agency's proposal is superficially more stringent than 40 CFR 52.21. This is because it does not include provisions of 40 CFR 52.21 that are obsolete, duplicative or extraneous. It does not include provisions in 40 CFR 52.21 that are currently stayed for which the stays could theoretically be lifted. It also does not include provisions that courts have found to be contrary to the Clean Air Act. These differences between 40 CFR 52.21 and proposed Part 204 will not create a state PSD program that is more stringent in practice than the federal PSD program. Rather, they will result in a state PSD program that would reflect the actual requirements of the federal PSD program as it was being implemented when the proposal was submitted.

- a-6. Hearing Officer Rabczak asked the Agency, "When you talk about expectations of the US EPA, did you have correspondence between you guys or was it mostly phone calls and meetings?" 11/27/18 TR at 60. Hearing Officer Rabczak followed up by asking "Any documents that you can submit into the record?" 11/27/18 TR at 60.

As indicated at hearing, the USEPA and the Illinois EPA typically communicated verbally about the Illinois EPA's proposal for Illinois' PSD program. At the Board's request, the Illinois EPA reviewed its files; all pertinent written communication between the Illinois EPA and the USEPA regarding the substance of this proposal have been attached. See attached Exhibit A.

- b. Please address whether IEPA considered additional or more stringent measures for its proposal as it relates to the Greenhouse Gases (GHGs). If so, please describe them, and explain why they were or were not included in IEPA's proposal.

In Part 204, the Illinois EPA has proposed a number of changes compared to the current federal rules at 40 CFR 52.21 to appropriately address relevant court decisions regarding the permitting of greenhouse gases (GHGs) under the PSD permitting program as detailed in pages 30 and 31 of the Statement of Reasons. In this regard, on October 2016, USEPA proposed revisions to the PSD regulations to further address the *Coalition* Amended Judgment. 81 Fed. Reg. 68110 (October 3, 2016). In this proposed rulemaking, USEPA proposed changes to several definitions, the provisions for Plantwide Applicability Limitations rated to GHG emissions GHG, and other provisions to ensure that a source is not required to obtain a PSD permit solely due to its potential to emit for GHGs meeting the applicable threshold.

Finally, Section 204.660 would include a significant emissions rate for GHGs. The Illinois EPA is proposing revisions for GHGs consistent with USEPA's proposed rules, as discussed in greater detail in the following discussions:

- Section 204.430, Greenhouse Gases (Statement of Reasons, pages 42-44)
- Section 204.490, Major Modification (Statement of Reasons, page 46)
- Section 204.510, Major Stationary Source (Statement of Reasons, pages 46-47)
- Section 204.660, Significant (Statement of Reasons, pages 62-64)
- Section 204.700, Subject to Regulation (Statement of Reasons, page 66)
- Subpart K: Plantwide Applicability Limitations (Statement of Reasons, page 79)

By way of general background, in 2010, USEPA issued the GHG Tailoring Rule (Tailoring Rule) addressing the permitting of GHG emissions under the PSD program and the Title V permit program. 75 Fed. Reg. 31514 (June 3, 2010). In June 2014, the U.S. Supreme Court ruled in *Utility Air Regulatory Group v. EPA (UARG)* that the USEPA may not consider GHG as a pollutant for purposes of determining whether a source is required to obtain a PSD permit or a Title V permit. *UARG v. EPA*, 134 S.Ct. 2427 (2014). Further, the Supreme Court held that PSD or Title V permits, that are required based on emissions of other pollutants, may continue to address GHG emissions. For this purpose, the Court described such sources as “anyway sources,” since permitting was not being required based only on emissions of GHGs. Consistent with this decision, the D.C. Circuit Court of Appeals issued an Amended Judgment in *Coalition for Responsible Regulation, Inc. v. Environmental Protection Agency*, Nos. 09-1322, 10-073, 10-1092 and 10-1167 (D.C. Cir. April 10, 2015). The Amended Judgment vacated the provisions in the PSD regulation that would require a stationary source to obtain a PSD permit solely because the source emits or has the potential to emit GHGs above the applicable major source or significant emission threshold. In addition, the D.C. Circuit directed USEPA to consider whether additional changes to these regulations were necessary in light of the Supreme Court's decision and if so, to make such changes. In August 2015, USEPA issued a final rule removing provisions requiring a stationary source to obtain a PSD permit solely because the source emits or has the potential to emit GHGs above the applicable major source thresholds or there is a significant emissions increase of GHGs from a modification. 80 Fed. Reg. 50199 (August 19, 2015) (addressing 40 CFR 51.166(b)(48)(v) and 40 CFR 52.21(b)(49)(v)).

Statement of Reasons

4. “Proposed Part 204 would be one in a series of permit programs intended to track emissions, to ensure that sources are meeting their regulatory obligations, and to maintain permits.” SOR at 7.

- a-1. Please provide examples of other permit programs that apply to sources subject to the proposed PSD permit programs.

As a general matter, there are only two basic types of permits for stationary sources of emissions in Illinois, construction or “preconstruction” permits and operating permits. Construction permits are to be obtained prior to construction. They authorize the construction of new stationary sources and projects involving emission units at an existing source. They also address the initial period of operation of sources and projects.

Operating permits address the ongoing operation of stationary sources. The operating permits for stationary sources that were subject to PSD permitting, as well for other major sources, are issued under the Clean Air Act Permit Program (CAAPP), as authorized by Section 39.5 of the Environmental Protection Act. The CAAPP is Illinois’ operating permit program for major stationary sources of emissions pursuant to Title V of the Clean Air Act. As related to the PSD permit program, CAAPP permits “carry over” limitations and requirements from the construction permit that were established under the PSD permit program. CAAPP permits also require sources to implement compliance procedures as appropriate to ensure ongoing compliance with substantive limitations and requirements established under the PSD permit program. Unlike construction permits, CAAPP permits have fixed terms and must be periodically renewed.

While it is convenient to refer to the PSD permit program and PSD permits for proposed projects, it is important to understand that PSD permitting in Illinois takes place in the context of the general construction permit program for sources of emissions. The Illinois EPA, like many other state permitting authorities, does not actually process stand-alone applications for PSD permits. Rather, for a proposed new stationary source or major modification that is subject to PSD, the permit applicant must submit a construction permit application in which the applicable requirements of the PSD permit program are addressed along with other air pollution control requirements that apply to the project. As a construction permit is issued for the source or modification that addresses applicable requirements of the PSD permit program and provides approval under the PSD program, the entire construction permit may loosely be referred to as a PSD permit. However, the PSD permit will likely only be a portion of the construction permit because the permit also addresses aspects of the proposed project that are outside of the PSD permit program. This may include requirements for emissions of pollutants for which PSD is not applicable, including requirements that are applicable to the project under Major Stationary Sources Construction and Modification, 35 Ill. Adm. Code Part 203, Illinois’ permit program for Nonattainment New Source Review (NaNSR).

- a-2. Hearing Officer Rabczak asked the Agency, "So when the IEPA issues a decision and it contains PSD as well as other permits . . . how do you see the appeal process for that?" 11/27/18 TR at 74-75.

Section 40.3 of the Act, 415 ILCS 5/40.3 and proposed Section 105, Subpart F, would govern appeals of PSD permits. Meanwhile Section 40(a) of the Act, 415 ILCS 5/40(a), and Section 105, Subpart B, would govern the appeal of state construction permits. To the extent that the proposed permit would also address a project subject to 35 Ill. Adm. Code 203, Sections 40(a) and (d) of the Act, 415 ILCS 5/40(a) and (d), and Section 105, Subpart B would govern any appeal of those requirements addressing nonattainment NSR. See also, 35 Ill. Adm. Code 105.200. As appropriate, the requirements of 35 Ill. Adm. Code 101, General Rules, set forth the procedural requirements generally applicable before the Board and are to be considered with the more specific procedural requirements identified above.

- b. Clarify whether the other existing programs have any overlapping requirements that apply to PSD sources. If so, comment on whether the Agency is planning to eliminate any duplicative requirements under various permit programs.

The existing construction permit programs, including the NaNSR permit program and the PSD permit program as it is currently implemented in Illinois, do not have "overlapping requirements." That is, they do not duplicate requirements in a way that would allow the issuance of a "PSD permit" for a major new source or major modification in Illinois to substitute for a construction permit or, as one is required, a "NaNSR permit." This is because these permit programs address different aspects of a proposed new major stationary source or major modification. These programs are addressed in a coordinated fashion with a single application for a construction permit under 35 Ill. Adm. Code 201.142, Illinois' general requirement that a person proposing a new source or a modification of an existing source that is not otherwise exempted pursuant to 35 Ill. Adm. Code 201.246 obtain a construction permit from the Illinois EPA before proceeding.

The construction permits program and the CAAPP also do not have "duplicative requirements." While CAAPP permits carry over limitations and requirements from construction permits, the CAAPP is separate from the construction permit program. CAAPP permits address the ongoing operation of stationary sources, not the proposed construction and modification of stationary sources.

- c. Hearing Officer Rabczak asked the Agency to "include in your post-hearing comments a couple of examples of what you issued under the PSD program for the record." Ms. Rabczak specifically requested a sample of a "simple" PSD

permit as well as a sample of a more complex one, and Board Member Carter requested that one of the samples regard a major modification and the other regard a new source. 11/27/18 TR at 80-82.

At the Board's request, the Illinois EPA is providing the following permits to the Board as examples of PSD permits historically issued by the Illinois EPA pursuant to 40 CFR 52.21. See Attached Exhibit B.

- **Prairie State (Construction Permit/PSD Approval for a new major stationary source):** Prairie State is a coal-fired power plant and associated coal mine outside of Marissa in Washington County. The plant has two coal boilers. Their emissions are controlled with selective catalytic reduction systems, electrostatic precipitators, scrubbers and wet electrostatic precipitators. In a subsequent appeal to USEPA's Environmental Appeals Board, numerous challenges to the permit were denied. *In re: Matter of Prairie State Generating Station*, 13 E.A.D. 1 (EAB 2006). The decision was subsequently upheld by the Seventh Circuit Court of Appeals. *Sierra Club, et al. v. Prairie State Generating Company, LLC*, 499 F.3d 653. This permit has been revised several times without changes to provisions that relate to PSD.
- **ExxonMobil Oil Corporation (Construction Permit/NaNSR/PSD Approval for a major modification):** This permit addresses a project to improve efficiency and reliability of various process units, including the Crude Unit, that would result in an increase in annual throughput. In addition to physical changes in certain units at the refinery, the permit also addressed the effects of those changes on operation and emissions of downstream units. This project resulted in significant increases of NO_x, CO, PM and PM₁₀; however, because the units affected by this project that contribute to the significant increase did not undergo a physical change or change in the method of operations, i.e., a modification, these units are not subject to BACT or LAER. The new emissions units, e.g., storage tanks, only emit VOM and VOM emissions were not significant. This permit has been revised several times without changes to provisions that relate to NaNSR or PSD.
- **Invenergy Nelson Expansion LLC (Construction Permit/PSD Approval for a "simple" major modification):** This permit addresses the addition of two simple cycle combustion turbine generating units to the source. The source already had two combined cycle "base load" generating units. This permit has been revised once without changes to provisions that relate to PSD.

5. At page 18, the Agency states an air quality analysis involves "assessing future ambient concentrations of a pollutant in an area as a result of a proposed project and comparing those concentrations to the air quality standard or other reference level."

Please explain what types of benchmarks are used as “reference levels” if pollutants being assessed do not have air quality standards.

For human health impacts, benchmarks can include USEPA’s Acute Exposure Guideline Levels, the Agency for Toxic Substances and Disease Registry’s (ATSDR) Minimal Risk Levels, and alternatively, occupational exposure standards.

For ecological impacts, benchmarks are screening concentration values for air, surface water, soil, sediment, and vegetation obtained from USEPA publications or reference documents, and/or from the peer-reviewed literature.

Part 101

6. In Section 101.202 IEPA proposes deleting the definition of “Participant in a CAAPP Comment Process”. Please comment whether IEPA has also proposed deleting all references to that term in other parts of the Board’s rules, if any.

The Illinois EPA is proposing the deletion of the definition for “Participant in a CAAPP Comment Process” given this term is not employed elsewhere within the Board’s procedural regulations. A search of the Board’s rules did not reveal use of this term in other parts of the Board’s rules.

7. In Section 101.201, IEPA adds a definition for both “Agency Record” and “OSFM record.”

- a. Please explain why IEPA believes these definitions are necessary.

The Board’s procedural regulations at Part 201 currently make no distinction between a “record” kept by the Clerk of the Board of all documents filed during a Board proceeding and a “record” of a final Agency decision as kept by the Agency of documents required by 35 Ill. Adm. Code Part 105. (The Agency believes that this question should have referred to Section 101.202, Definitions). For instance, the Board’s current definition of “‘Record’ means the official collection, as kept by the Clerk, of all documents and exhibits including pleadings, transcripts, and orders filed during the course of a proceeding.” See, 35 Ill. Adm. Code 101.202. Meanwhile, “‘Clerk’ means the Clerk of the Board.” *Id.* As it exists today, Part 201 does not include the definitions necessary to distinguish the distinct administrative processes before the Board and a state agency such as the Illinois EPA or the OFSM. Separate definitions are also warranted for an “Agency record” versus an “OSFM record” given the differing documents included within and requirements associated with each agency’s respective records.

An example of the potential confusion caused by current Board procedural regulations would be Sections 105.214 and 105.412 that currently provide the

“hearing will be based exclusively on the record before the Agency at the time the permit or decision was issued.” However, **“record,”** as currently defined by the Board rules, is the **“official collection, as kept by the Clerk, of all documents and exhibits including pleadings, transcripts, and orders filed during the course of a proceeding.”** The official collection of the documents kept by the Clerk could not have possibly been before the Agency at the time of permit issuance.

It should be noted as well, that Section 105.302(f) already made use of the term “Agency record.”

- b. Please also comment on whether IEPA contacted OSFM for its position on adding this definition and if so, please provide OSFM’s position.

Given the language proposed to address the distinct administrative matters reviewed by the Board and administrative actions taken by the Illinois EPA and the OSFM, the Illinois EPA provided a draft of proposed Parts 101 and 105 to the OSFM prior to filing with the Board. Subsequent discussions were held between counsel for the Illinois EPA and the OSFM. OSFM had no objection to the proposed language addressing an “OSFM record.”

- c-1. Further, please comment how these proposed definitions are related to the PSD requirements.

The Agency’s proposal includes certain definitions in Part 101 necessary for the issuance or denial of a PSD permit appeal before the Board. As discussed above, the Board’s procedural regulations currently make no distinction between a “record” before the Board in its *review* of a final agency decision and a “record” before the Agency when *making* its final agency decision. Similarly, the Board’s procedural regulations currently make no distinction between “public comments” submitted to the Board during a pending appeal of an agency decision and “public comments” submitted to the Agency during a public comment period for a proposed decision. Nor do the Board’s procedural regulations make any note of an “Agency public hearing” or an “Agency public hearing record.”

These definitions are directly relevant to any review of a PSD permit by the Board. First, in addition to the applicant, any person who participated in the *Agency public comment* process for a PSD permit and is either aggrieved or has an interest that is or may be adversely affected by the PSD permit may file a petition with the Board. *See*, proposed 35 Ill. Adm. Code Section 105.604 and Section 40.3 of the Act. In addition, if the petitioner failed to participate in the *Agency’s public comment* process, the person may still file a petition but only on those issues where the final permit conditions make changes to the draft permit that was available during the *Agency public comment* process. *Id.*

Moreover, the requirements for Petition Content of any PSD petition for review filed with the Board require such definitions. Notably, the petition must include the issues proposed for review, citing to the *Agency record* where the issues were raised and if such issues were not raised during the *Agency public comment process*, the petition must explain why the issues were not required to be raised during the public comment process. *See*, proposed 35 Ill. Adm. Code Section 105.608 and Section 40.3 of the Act.

In addition, the Agency is responsible for filing a copy of its entire Agency record as prescribed by proposed Section 105.612(b) with the Clerk of the Board. *See*, proposed 35 Ill. Adm. Code 105.612. The Agency's record necessarily includes any public comments received by means of testimony at any *Agency public hearing* or any written comments submitted during the *Agency public comment period*. These documents are necessarily included within any *Agency public hearing record*. *See*, 35 Ill. Adm. Code 105.612. Finally, the decision of the Board will be based exclusively on the *Agency record*. *See*, proposed 35 Ill. Adm. Code Section 105.614 and Section 40.3 of the Act.

- c-2. Kathryn Pamenter, representing the Illinois Attorney General's Office, asked the Agency, "The definition of Agency record provide -- means a record of final Agency decision as kept by the Agency of those documents required by the state agency record meeting the applicable requirements of 35 Ill. Adm. Code Part 105. Can you clarify if there is a state agency record requiring a record of final Agency decision or whether that second word record should be deleted?" 11/27/18 TR at 85.

The Illinois EPA has proposed the following definition of "Agency record" in 35 Ill. Adm. Code 101.202:

"Agency record" means a record of final Agency decision, as kept by Agency, of those documents required by the *State agency record* meeting the applicable requirements of 35 Ill. Adm. Code Part 105. (*emphasis added*).

The question focuses on whether the definition of "Agency record" should use the phrase *State agency* in lieu of the phrase *State agency record*. The Illinois EPA's proposed definition of "Agency record" is correct. The phrase *State agency record* refers to the applicable requirements of 35 Ill. Adm. Code Part 105 regarding what must be kept in the *State agency record*. *See*, 35 Ill. Adm. Code 105.212, 105.302(f), 105.410, 105.612. This necessarily differs from the OSFM record and what must be included in the OSFM record of decision. *See*, 35 Ill. Adm. Code 101.202 and 105.508.

8. Please confirm that Section 101.302(e)(3) includes the Agency's PSD permit

decisions under new proposed Part 204, as required by 415 ILCS 5/40.3(c).

The language in Section 101.302(e)(3) providing "Petition for Review of Agency Permit Decision" appropriately addresses any Agency PSD permit decision. However, upon further review the language does not appear to address Section 40.3(a)(1) of the Act in those instances where the applicant petitions for a hearing before the Board to compel the Agency to act on a pending application. *See*, proposed 35 Ill. Adm. Code 105.604(b). Given that the Agency would not have made a permit decision in this instance, any petition to compel the Agency to act does not appear to fall within the language providing for "Petition for Review of Agency Permit Decision." Nor would it appear to fall within "or any other appeal filed under Section 40 of the Act" given such an appeal would be filed under Section 40.3(a)(1) of the Act. As a result of this question, the Agency would propose revising the language in Section 101.302(e)(3) as follows:

Petition for Review of Agency Permit Decision, UST Decision or any other permit appeal filed under Section 40 or 40.3 of the Act, §75;

- 9-a. In Section 101.610, IEPA proposes amending "any required record or recommendation" to "any required Agency record, OSFM record, local siting authority record or recommendation." Please explain why IEPA believes this revision is necessary.

The Illinois EPA proposed amending "any required record or recommendation" to "any required Agency record, OSFM record, local siting authority record or recommendation" given the hearing officer currently has the authority in Section 101.610 to order the filing of any required record. However, record, as currently defined by the Board rules is the "official collection, as kept by the Clerk, of all documents and exhibits including pleadings, transcripts, and orders filed during the course of a proceeding." As written, the Hearing Officer may require the filing of the Board's hearing record with the Board and not the administrative record before the administrative agency at the time of its final decision.

- 9-b. With regard to the Agency's proposed amendments to Section 101.610(f), Ms. Pamenter asked the Agency, "Subsection F . . . provides 'Determine that a witness is adverse, hostile or unwilling under Section 101.624.' We wanted to get clarification on whether any additional language after the word 'unwilling' should be included? It's on page 23." 11/27/18 TR at 87.

35 Ill. Adm. Code Section 610, Duties and Authorities of the Hearing Officer, subsection (f) currently provides as follows:

The hearing officer has the duty to manage proceedings assigned, to set hearings, to conduct a fair hearing, to take all necessary action to avoid delay, to maintain order, and to ensure development of a clear, complete, and concise record for timely transmission to the Board. The hearing officer has

all powers necessary to these ends, including the authority to:

- f) Determine that a witness is adverse, hostile, or unwilling under Section 101.624;**

The language of Section 610(f) is consistent with the language included in Section 101.624 pertaining to the examination of adverse, hostile or unwilling witnesses. Consequently, the Illinois EPA would not propose the inclusion of additional clarifying language to 35 Ill. Adm. Code 610(f).

Part 105

10. In the table of contents, IEPA added “The” before Agency. Please comment why.

The Illinois EPA added the word “The” before “Agency Record” in the Table of Contents for Section 105.212 and Section 105.410 to highlight the difference between any administrative record filed by the Illinois EPA (commonly referred to as the “Agency” before the Board) and any other State agency administrative record filed by another State agency. See also, proposed definition of “Agency record” in Section 101.202 defined as “a record of final Agency decision, as kept by the Agency of those documents required by the State agency record meeting the applicable requirements of 35 Ill. Adm. Code Part 105.” The insertion of the word “The” was meant to highlight that this referred to the Illinois EPA’s or, as commonly referred to, “the Agency’s”, record as defined in Section 101.202 and not merely any State agency’s record. This approach would be consistent with the Illinois EPA’s proposed reference to Section 105.614, “The Agency Record.”

While responding to this question, the Illinois EPA noted that it inadvertently neglected to carry over this additional “The” in the heading to the relevant sections, i.e., Section 105.212 and Section 105.410.

11. In Sections 105.116, and 105.118, IEPA proposes to change “State Agency” to “Agency” or “OSFM.” Please explain why this change is necessary.

The Illinois EPA proposed additional text to Sections 105.116 and 105.118 to provide further clarity, specifically, that the Illinois EPA and the OSFM are each only responsible for the filing of their respective administrative records and that any sanctions imposed by the Board will only be upon the appropriate state agency.

12. In Sections 105.212(a) and (b), 105.410(a), 105.412, and 105.612, IEPA proposes adding “Agency” before record. A similar change is proposed in Section 105.508(b), where “OSFM” is added before record. Please comment why IEPA proposes these amendments.

The Illinois EPA proposed additional text to Sections 105.212(a) and (b), 105.410(a), 105.412, 105.508(b) and 105.612 to provide further clarity, specifically, an additional identifier as to which administrative agency the record is referring to in each section. It should be noted that the heading to Section 105.508 as it currently exists in the Board's procedural rules refers to "OSFM Record and Appearance."

13. IEPA's amendments to Section 105.608(a)(4) require a petition to include "[t]he issues proposed for review, citing to a specific permit term or condition where applicable and to the Agency record where those issues were raised with reasonable specificity during the public comment period." They also require attaching the cited public comment to the petition. Please explain:

- a. Does the proposed language limit the statutory language of 415 ILCS 5/40.3(a)(2)(ii) that only requires "citing to the record where those issues were raised"?

The proposed language is consistent with the statute's language and does not demand more than the petition requirements found in Section 40.3(a)(2)(ii) of the Act.¹¹ The added details in the proposed language are

¹¹ Notably, Sections 40.3(a)(2)(ii) and (iii) of the Act require the petition to "state the issues proposed for review, citing to the record where those issues were raised . . . and explain why the Agency's previous response, if any, to those issues is . . . clearly erroneous." This standard is consistent with the EAB's historic federal administrative review of PSD permitting decisions. *Accord., In re City of Palmdale* 15 E.A.D. 700, 705 (EAB 2012) (A "petitioner must not only specify objections to the permit but also must explain why the permit issuer's previous response to those objections is clearly erroneous otherwise warrants review."). The EAB best explained it as follows:

The regulatory requirement that a petitioner must raise issues during the public comment period "is not an arbitrary hurdle, placed in the path of potential petitioners simply to make the process of review more difficult; rather, it serves an important function related to the efficiency and integrity of the overall administrative scheme. As we have explained in the past, "[t]he intent of these rules is to ensure that the permitting authority * * * has the first opportunity to address any objections to the permit, and that the permit process will have some finality." *BP Cherry Point*, 12 E.A.D. at 219 (quoting *In re Sutter Power Plant*, 8 E.A.D. 680, 687 (EAB 1999)). "The effective, efficient, and predictable administration of the permitting process demands that the permit issuer be given the opportunity address potential problems with draft permits before they become final." *In re Encogen Cogeneration Facility*, 8 E.A.D. 244, 250 (EAB 1999). The Board and the Administrator have explained that the PSD permitting process requires a specific time for public comment so that issues may be raised and "the permit issuer can make timely and appropriate adjustments to the permit determination, or, if no adjustments are made, the permit issuer can include an explanation of why none are necessary." *In re Union County Res. Recovery Facility*, 3 E.A.D. 455, 456 (Adm'r 1990); *accord Sutter Power*, 8 E.A.D. at 687. Accordingly, the requirement to raise all reasonably ascertainable issues and reasonably available arguments during the public comment period has an important role in establishing the proper staging of the permit decision process. We have explained as follows:

complementary and will aid the Board (as well as the Agency in its advocacy capacity) in ensuring that support in the Agency record for the proposed issues for review is easily and readily verifiable.

The requirement asking a petitioner to cite to the permit, where applicable, ensures that the appeal can be traced to the permit decision. In the case of a permit denial, such a requirement would also be relevant but perhaps less useful as a denial usually contains a recitation of only the reasons that the permit is denied. However, in the case of an appeal of permit conditions, a PSD permit contains numerous conditions, many of which have numerous elements.¹² A requirement for linkage to the relevant permit condition(s), which not only serves as an identifier for the permit but for an accompanying project summary and/or responsiveness summary, will facilitate a review of the Agency record to ascertain that the appeal is properly grounded in the permit decision.

The requirement for a petitioner to cite to the Agency record with reasonable specificity is similarly useful. As discussed further in response to the following question, the notion of “reasonable specificity” is an inherent principle of the administrative review of the decisions of the permitting authority in the federal PSD program, ensuring that a petitioner be clear in its presentation of agency record support. In this instance, the language of the statute requires that a petitioner cite to the Agency record where the proposed issue is raised. The detailed requirement of specificity makes certain that a petitioner does not meet such a standard by being vague or cryptic in the manner in which the proposed issue was raised before the permitting authority during the processing of the permit application.

If an issue is not raised during the notice and comment process, * * * the permitting authority is provided no opportunity to address the issue specifically prior to permit issuance. In such instances, if the Board were to exercise jurisdiction, it would become the first-level decisionmaker as to such newly raised issues, contrary to the expectation that “most permit conditions should be finally determined at the [permit authority] level.” *Knauf I*, 8 E.A.D. at 127 (quoting 45 Fed. Reg. 33,290, 33,412 (May 19, 1980)). Alternatively, the Board might remand such issues back to the permitting authority for initial determination at that level, potentially resulting in an unnecessarily protracted permitting process, where each time a final permit is issued and a new issue is raised on review, the permit must be sent back to the permit issuer for further consideration. Such an approach would undermine the efficiency, predictability and finality of the permitting process.

BP Cherry Point, 12 E.A.D at 219-20.

In re Christian County Generation, LLC 13 E.A.D. 49, 459-460 (EAB 2008).

¹² A single permit condition can set emission limits for multiple emission units, for a number of pollutants with both short-term and long-term limits on emissions.

Finally, the proposed regulatory language is consistent with the Board's authority in adopting these implementing rules. The Board's authority includes "the power to do all that is reasonably necessary to perform the duty conferred by the statute." *Oak Liquors, Inc., v. Zagel*, 90 Ill.App.3d 379, (1st Dist. 1980). In performing its duty to promulgate the rules, the Board possesses a "wide latitude" to accomplish this objective, *Freedom Oil Co. v. Pollution Control Board*, 275 Ill.App.3d 508, 514 (4th Dist. 1995), and the outcome should be rules that are "reasonable, within the agency's statutory authority, and adequately related to the purpose of the underlying act." *Strube v. Pollution Control Board*, 242 Ill.App.3d 832, 852 (3rd Dist. 1993), citing *People ex rel. Charles v. Telford*, 48 Ill.App.3d 928, 931 (Ill. 1977). The requirements for identifying permit conditions and identifying, with reasonable specificity, the proposed issues in the record are not unreasonable, are consistent with Section 40.3(a)(2)(ii) and are adequately related to the right of administrative review offered by the statute. The absence of an express reference to these specific procedural requirements in the Act does not evince a legislative intent to prohibit them in the Board's rules implementing the Act. Compare, *Freedom Oil v. Pollution Control Board*, *infra* (Board's action in conducting a special meeting by telephone conference fell within Board's authority to conduct meetings under the Open Meetings Act).

- b. What does IEPA consider to be a "reasonable specificity"? Please provide examples.

As discussed above, "reasonable specificity" is a necessary concept to ensure the permitting authority can appropriately address public comment and the reviewing authority can ascertain the challenged issue on appeal.¹³ This approach is well established by EAB precedent concluding that petitioners must include specific information supporting their allegations. It is not sufficient for petitions to simply repeat objections made during the comment period. Rather, the petitions should demonstrate why the permitting authority's response to those objections necessitates review. *In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 5 (EAB 2000) citing *In re Sutter Power Plant*, 8 E.A.D. 680, 687 (EAB 1999). The petition should explain why the permitting authority's written response to comments raised during the public comment period were incorrect or inadequate. *In re Knauf Fiber Glass, GmbH*, 9 E.A.D. 1, 6 (EAB 2000). This affords the permitting authority with notice and an opportunity to cure the alleged deficiencies in

¹³ The principle of "reasonable specificity" is also present in public petitions to the USEPA to object to a Title V. See, 40 CFR 70.8 ("Any such petition shall be based only on objections to the permit that were raised with *reasonable specificity* during the public comment period provided for in §70.7(h) of this part, unless the petitioner demonstrates that it was impracticable to raise such objections within such period, or unless the grounds for such objection arose after such period." (*emphasis added*)).

the permit prior to issuance. *In re Kendall New Century Development*, 11 E.A.D. 40, 48 (EAB, April 29, 2003).

Examples may be found on the EAB's website at https://yosemite.epa.gov/oa/EAB_Web_Docket.nsf. For specific examples, the Illinois EPA would point the Board to the following:

- *In re: City of Palmdale (Palmdale Hybrid Power Project)*, 15 E.A.D. 700 (EAB 2012)
 - *In re: Christian County Generation, LLC*, 13 E.A.D. 449 (EAB 2008)
 - *In re: Matter of Prairie State Generating Station*, 13 E.A.D. 1 (EAB 2006)
 - *In re: Steel Dynamics, Inc.*, 9 E.A.D. 165 (EAB 2000)
- c. Is it possible that some part of the Agency record related to a PSD permit could be beyond public comment period? Are there instances when a document in the record was not produced during a public comment period? Would the issues raised in a permit application itself or during correspondence with the Agency be considered "during the public comment period"?

The Agency record for a PSD permit will certainly include documents prepared after the close of the public comment period, notably the issued PSD permit or permit denial that would be the subject of any appeal and the Agency's formal response to any comments received during the public comment period. Most documents in a permit record are typically generated outside of the public comment period, typically before the public comment period but, again there are those documents that are generated in direct response to the public comment period.

Issues raised in a permit application itself or during correspondence with the Agency are not going to relate to the public comment period unless the documents were either submitted to the Agency during the comment period (e.g., as where an applicant for a PSD permit elects to submit written comments during the comment period to respond to concerns expressed by the public during a public hearing) or independently raised as an issue in a public comment.

- d. If a petitioner does not have a copy of the record when filing a petition, would a failure to attach a cited public comment to the petition preclude the petitioner from filing a petition?

An individual would not be precluded from petitioning for review of a PSD permit if he or she does not have a complete copy of the Agency record for the PSD permit proceeding. However, to petition for review of a PSD permit, an individual would have to show that the issue(s) that are the subject of the petition were raised during the public comment period. The exception would be those issue(s) that were not required to be raised during the public

comment period (*e.g.*, if it involved subsequent developments which could not have been raised during the public comment period). *See*, 415 ILCS 5/40.3(a)(2). This requirement could be met by providing a copy of the relevant written comment(s) submitted to the Agency or, in the event, the petitioner did not possess a copy of the relevant written comment(s) submitted to the Agency, this requirement could be met with an annotated copy of the response to comments. If comments were provided orally at a public hearing, this requirement could be met with an annotated copy of the transcript for the public hearing showing where the comment was made. Notably, such documents are accessible by the public as the relevant documents, *i.e.*, the transcript of the public hearing, the final permit and accompanying responsiveness summary, are posted on the internet by the Illinois EPA. In the event that the issue(s) were not required to be raised during the public comment period, this requirement could also be met as the petitioner explains that the petition involved subsequent developments which could not have been raised during the public comment period.

- e. Would the following revision of Section 105.608 be acceptable to IEPA:

"Section 105.608 Petition Content Requirements"

- a) All petitions under Section 105.604 must comply with 35 Ill. Adm. Code 101.Subpart C.
- a b) A For petitions under Section 105.604(a) or (c) of this Subpart, must contain within the body of the petition all pertinent information in support of each issue raised for review shall be contained within the body of the petition. The Board will not consider arguments, assertions, claims, or other information incorporated into the petition by reference. In addition to the requirements of 35 Ill. Adm. Code 101.Subpart C, the
The petition must include:
- 1) The Agency's final decision or issued PSD permit;
 - 2) A statement as to how the petitioner participated in the Agency public comment process;
 - 3) All such facts as necessary to demonstrate that the petitioner is aggrieved or has an interest that is or may be adversely affected;
 - 4) The issues proposed for review, citing to a specific permit term or condition, where applicable, and to the Agency record where those issues were raised with reasonable specificity during the public comment period, citing to any relevant document and page numbers in public comments submitted to the Agency record and

attaching ~~this public comment~~ a copy of the cited document to the petition, if available. If the issues proposed for review were not raised with reasonable specificity during the public comment period, the petition must *explain why such issues were not required to be raised during the Agency public comment process; and*

5) *An explanation why the Agency's previous response, if any, to the issues proposed for review, ~~if any~~, was:*

A) *Clearly erroneous; or*

B) *An exercise of discretion or an important policy consideration that the Board should, in its discretion, review. [415 ILCS 5/40.3(a)(2)]*

~~b c)~~ A ~~For petitions under Section 105.604(b) of this Subpart, in addition to the requirements of 35 Ill. Adm. Code 101. Subpart C,~~ must also include the date that a complete permit application for a PSD permit was submitted to the Agency and an explanation as to why the submittal made on such date made the application complete.

~~e d)~~ A ~~For petitions under Section 105.604(a) or (c) of this Subpart, the petition may include a request to stay the effectiveness of any final Agency action on a PSD permit application until final action is taken by the Board under Section 40.3 of the Act. Any stay request must include a clear delineation of all the contested conditions of the PSD permit. To the extent that a stay of any or all of the uncontested conditions of the permit is sought, any stay request must indicate how these uncontested conditions would be affected by the Board's review of the contested conditions.~~

~~d e)~~ For petitions under Section 105.604(c) of this Subpart, any A stay request filed by a person other than permit applicant must also demonstrate:

1) *That an immediate stay is required in order to preserve the status quo without endangering the public;*

2) *That it is not contrary to public policy; and*

3) *That there is a reasonable likelihood of success on the merits. [415 ILCS 5/40.3(d)(3)]"*

The above revisions would be acceptable to the Illinois EPA with the exception of those proposed by the Board in Section 105.608(b)(4) and

(e). Regarding Section 105.608(b)(4), the Agency would agree that the following language would be acceptable:

The issues proposed for review, citing to a specific permit term or condition, where applicable, and to the Agency record where those issues were raised with reasonable specificity during the public comment period, citing to any relevant page numbers in public comments submitted to the Agency and attaching this public comment to the petition. If the issues proposed for review were not raised with reasonable specificity during the public comment period, the petition must explain why such issues were not required to be raised during the Agency public comment process; and

The additional changes to Section 105.608(b)(4) proposed by the Board are not acceptable given this language suggests that a petitioner could cite to *any* document in the Agency record to support its assertion that the issue was raised during the public comment period. As previously discussed, the Agency record for a PSD permit will certainly include the initial application submitted by the applicant, correspondence with the Agency (that is typically not going to relate to the public comment period unless the documents were submitted to the Agency during the public comment period as a public comment) and will also necessarily include documents prepared after the close of the public comment period. Again, only those issues that were appropriately raised during the public comment period (and for which the Agency's previous response to those issues was clearly erroneous or which involve an exercise of discretion or an important policy consideration that the Board should, in its discretion, review) are appropriately before the Board for review. *See*, 415 ILCS 5/40.3(a)(2).

Nor would the change proposed by the Board to Section 105.608(e) be acceptable, as the Board's reference to "a person other than permit applicant" in lieu of "petitions under Section 105.604(c)" suggests that any "person" as defined under the Act, 415 ILCS 5/3.315 and implementing regulations, 35 Ill. Adm. Code 101.202, may make a stay request to the Board. However, the language of Section 105.604(c) is not so broad as any "person" as defined under the Act; a stay request may only be made by the applicant or "any person who participated in the Agency public comment process for a PSD permit and is either aggrieved or has an interest that is or may be adversely affected by the PSD permit."¹⁴

¹⁴ In addition, if the petitioner failed to participate in the Agency's public comment process, the person may still petition for hearing, but only upon issues where the final permit conditions reflect

14. In Section 105.610(b), please comment if it is appropriate to delete the sentence starting “The party requesting the stay has the burden...” because this requirement is already included in section 105.608(e) immediately above.

As an initial point of clarification, it appears that the Board intended to make reference to Section 105.608(d) rather than Section 105.608(e) in this question; the Illinois EPA did not propose a subsection (e) to Section 105.608 as part of its regulatory proposal to the Board.

Section 105.608 generally details the petition content requirements and in subsection (d) details the petition content requirements for any stay request made by any person who filed a petition for review pursuant to Section 105.604. Meanwhile, Section 105.610 delineates the Board’s standards for granting stays, when requested by the applicant in subsection (a) and when requested by a party other than the permit applicant in subsection (b). The language in subsection (a) is verbatim with the legislative text of Section 40.3(d)(2) of the Act and the language in subsection (b) is verbatim with the legislative mandate in Section 40.3(d)(3). In order to avoid any needless confusion, the Agency would not alter the language included within its regulatory proposal.

15. In Section 105.614 please explain what you mean by “technical decisions contained therein reflect considered judgment by the Agency”. Please provide examples. Please explain the Board’s authority on such a standard of review; please cite to provisions of the Act, case law, or Board regulations or practice that supports such standard.

The framework in the Board’s review of any PSD permitting decision will be based “exclusively on the record before the Agency unless the parties agree to supplement the record.” See, Section 40.3(d)(1). Consistent with proposed Section 105.612, the Agency’s record will not only include application material and public comments, but any other documentation that the Agency relied upon in making this decision. *Accord.*, 40 CFR 124.9; *see also, In re Energy Answers Arecibo, LLC*, 16 EAD 294, 349 (2014) (the EPA’s record contained all required information including the rationale for issuing the draft permit and basis for accompanying permit conditions, including the application and supporting data, the draft permit, the statement of basis, all documents cited in the statement of basis, other documents contained in the supporting file for the draft permit and all communications between EPA and the applicant regarding the permit application). The record must explain the Agency’s decision-making process and rational. *In re Newmont Nevada Energy Investment L.L.C. TS Power Plant*, 12 EAD 429, 463 (2005) (finding that the permitting authority fully documented the rationale for its NO_x BACT determination and that “where the rationale for the decision can be discerned from the record, we decline to remand”); *see also, Letter from Carl Daly, Air Program, USEPA Region 8 to Bryce Bird, Director, Division of Air Quality, Utah Dept. of*

changes from the draft permit that was made available during the Agency public comment process. *See*, 415 ILCS 5/40/3(a)(2) and 35 Ill. Adm. Code 105.604(c).

Environmental Quality, regarding Comments on Intent to Approve for Kennecott Repowering Project: Greenhouse Gas BACT, dated October 27, 2011 (“the record for the permit should fully explain the decision-making process and rationale for the proposed GHG BACT”). Inherent in this principle is that the rationale for any PSD permitting decision by any permitting authority, that are often complex and require detailed technical review, should clearly be set forth in the record particularly as the decision was questioned or challenged by public comment.¹⁵

Consistent with this approach, a petitioner before the EAB, in identifying its objections to a permit, must make its allegations both “specific and substantiated,” especially where the object involves the “technical judgments” of the permit authority. *See, In re Prairie State Generating Company*, 13 E.A.D. 1, 94-95 (EAB 2006); *In re BP Cherry Point*, 12 E.A.D. 209, 233 (EAB 2005) (“serves an important function within the framework of the Agency’s administrative process; it ensures that the locus of responsibility for important technical decisionmaking rests primarily with the permitting authority, which has the relevant specialized expertise and experience.”); *see also, In re Avon Custom Mixing Services, Inc.*, 10 E.A.D. 700, 705 (EAB 2002); *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 404 (EAB 1997). This ensures that the issues and/or arguments on appeal are well defined and actually represent a “bona fide” disagreement between the petitioner and the permit authority. If expert opinions or data are in conflict, the EAB examines the record of the proceeding to determine whether the permit authority has adequately considered the issue and whether its decision is “rational in light of all the

¹⁵ Deference is routinely afforded the administering agency in technically complex fields such as the construction permitting of new or modified stationary sources. *See, Citizens Against the Refinery’s Effect, Inc. v. USEPA* 643 F.2d 178 (4th Cir. 1981), *citing FPC v. Florida Power & Light Co.*, 404 U.S. 453, 92 S.Ct. 637, 30 L.Ed.2d 600 (1972) reh.den. 405 U.S. 948, 92 S.Ct. 929, 30 L.Ed.2d 819 (1972). (“Analysis of modeling results required for PSD applications is a highly technical area particularly within the expertise of the EPA, and thus the agency interpretations should be given great weight by the court.”). *Accord. Prairie State*, 499 F.3d 653, 656 *citing Chevron U.S.A. v. Natural Resources Defense Council, Inc.* 467 U.S. 837, 842-43, 104S.Ct. 2778, 81 L.Ed. 2d 694 (1984); *Sierra Club v. EPA*, 375 F.3d 537, 539-40 (7th Cir. 2004) (“the treatment of differences of degree in a technically complex field with limited statutory guidance is entrusted to the judgment of the agency that administers the regulatory scheme rather than to courts of generalist judges.”).

Consistent with these statements by the federal judiciary, the EAB has found as follows:

On matters that are fundamentally technical or scientific in nature, the Board will typically defer to a permit issuer’s technical expertise and experiences as long as the permit issuer adequately explains its rationale and supports its reasoning in the administrative record. *See In re Dominion Energy Brayton Point, LLC (“Dominion I”)*, 12 E.A.D. 490, 510 (EAB 2006); *see also, e.g., In re Russell City Energy Ctr. (“RCEC”)*, 15 E.A.D. 1, 66 (EAB 2010), *petition denied sub. nom. Chabot-Las Positas Cmty. Coll. Dist. v. EPA*, 482 F. App’x 219 (9th Cir. 2012); *In re Peabody W. Coal Co.*, 12 E.A.D. 22, 41, 46, 51 (EAB 2005); *NE Hub*, 7 E.A.D. at 570-71.

In re City of Palmdale (Palmdale Hybrid Power Project), 15 E.A.D. 700, 705 (EAB 2012).

information in the record, including the conflicting opinions and data.” *In re Three Mountain Power, LLC*, 10 E.A.D. 39, 50 (EAB 2001), citing, *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 180, fn. 16 (EAB 2000).

As previously discussed, Section 40.3(a)(2)(iii) provides that the petition shall “explain why the Agency’s previous response, if any, to those issues is . . . *clearly erroneous* . . .” In a similar context, the EAB has previously held when evaluating a challenged permit decision for *clear error*, the reviewing authority examines the administrative record that serves as the basis for the permit to determine *whether the permit issuer exercised “considered judgment” in issuing the permit*. See, e.g., *In re Steel Dynamics, Inc.*, 9 E.A.D. 165, 191, 224-25 (EAB 2000); *In re Ash Grove Cement Co.*, 7 E.A.D. 387, 417-18 (EAB 1997); see also *In re Shell Offshore, Inc.*, 13 E.A.D. 357, 386 (EAB 2007) (permit issuer must articulate with reasonable clarity the reasons supporting its conclusions and the significance of the crucial facts it relied on in reaching its conclusions). Similarly, the language of Section 105.614 provides that the technical decisions are to reflect “considered judgment of the Agency.”

Examples may be found on the EAB’s website at https://yosemite.epa.gov/oa/EAB_Web_Docket.nsf. For specific examples, the Illinois EPA would point the Board:

- *In re: City of Palmdale (Palmdale Hybrid Power Project)*, 15 E.A.D. 700 (EAB 2012)
- *In re: Matter of Prairie State Generating Station*, 13 E.A.D. 1 (EAB 2006)
- *In re: Steel Dynamics, Inc.*, 9 E.A.D. 165 (EAB 2000)

16. In Section 105.614(a), please comment on why IEPA states that the Board will not hold a hearing if summary judgement is granted, considering that granting summary judgment, by definition, means that no hearing will be held? Please explain why this explanation is necessary here, while it is not included in any other relevant part of the Code addressing hearings.

As proposed by the Illinois EPA, proposed Section 105.614(a) and (b) would provide as follows:

Except as provided in subsections (a) and (b), the Board will conduct a public hearing, in accordance with 35 Ill. Adm. Code 101, Subpart F, upon an appropriately filed petition for review under this Subpart. *The hearing and decision of the Board will be based exclusively on the Agency record at the time the permit or decision was issued, unless the parties agree to supplement the Agency record.* Any PSD permit issued by the Agency shall be upheld by the Board if the technical decisions contained therein reflect considered judgment by the Agency. [415 ILCS 5/40.3(d)(1)]

- a) **The Board will not hold a hearing on a petition for review under this Subpart if the Board disposes of the petition on a motion for summary judgment brought under 35 Ill. Adm. Code 101.516.**
- b) **The Board will not hold a hearing on a petition for review under this Subpart if the Board determines that:**
 - i) **The petition is *frivolous*; or**
 - ii) **The petition *lacks facially adequate factual statements* as required by Section 105.608 of this Subpart [415 ILCS 5/40.3(a)(2)].**

The proposed language in Section 105.614(a) is appropriate in order to avoid any unnecessary confusion in the implementing regulations that could result from the statutory mandate set forth in Section 40.3(a)(2) of the Act providing that “[t]he Board shall hold a hearing upon a petition to contest the decision of the Agency under this paragraph (a)(2) unless the request is determined by the Board to be frivolous or to lack facially adequate factual statements required in this paragraph (a)(2).” As set forth above, the language of Section 105.614(b) memorializes the legislative mandate of Section 40.3(a)(2). However, if proposed Section 105.614 were to simply provide that the Board will conduct a public hearing unless the Board determines that the petition is *frivolous* or the petition *lacks facially adequate factual statements* as required by Section 105.608, it could potentially suggest to the reader that a petition for review may not be disposed of by an appropriately filed motion for summary judgment. To avoid any needless confusion in the event that the Board were to dispose of a petition for review on a motion for summary judgement, the Illinois EPA included the proposed language of Section 105.614(a).

Part 204

SUBPART A: GENERAL PROVISIONS

17. Section 204.100 lists federal provisions incorporated by reference. Please clarify whether all federal regulations incorporated by reference are cited in the proposed rule text.

All federal regulations incorporated by reference in proposed Part 204 are cited in proposed Part 204.

- a. If so, please point to the proposed rule language for each of them that incorporates the provision. Please add language in the rule text to indicate that the cited federal rules are incorporated by reference in Section 204.100, to reflect incorporation. For example:

The applicable standards as set forth in 40 CFR Parts 60, 61, 62

and 63, incorporated by reference at Section 204.100. Proposed Section 204.230 (a).

The Illinois EPA does not understand what the Board is asking the Agency to do in this instance. It is acceptable to the Illinois EPA if the Board adds the above language to all instances that the proposed rules cite to the federal regulations.

- b. Please include citations to the federal rules proposed to be incorporated by reference in appropriate sections of the proposed rules.

The Illinois EPA does not understand the question that is being posed by the Board. The proposed rule does include appropriate citations when referencing federal provisions.

18. Subsections “hh”, “ii” and “xx” are indicated as “reserved”. Please explain why this is necessary, considering that it is not the Board’s practice to reserve numbering in this manner.

35 Ill. Adm. Code Section 204.100(hh), (ii) and (xx) have been reserved in the same manner that USEPA has reserved 40 CFR Part 83, 40 CFR Part 84 and 40 CFR Part 99 in the Code of Federal Regulations. In the event USEPA was to promulgate regulations in 40 CFR Part 83, 84 or 90 in the future and a corresponding revision needed to take place to Part 204, any incorporation could easily be made by the Board without changing the corresponding numbering of this Section.

19. In Section 204.110 the List of Abbreviations includes “Illinois EPA”. Please comment on whether it is appropriate to replace it here, and through the rest of Part 204 with “Agency” to be consistent with the rest of the language of the Board rules when referring to IEPA.

This change is acceptable to the Illinois EPA.

SUBPART B: DEFINITIONS

20. In Section 204.220, please explain whether the definition of “Adverse impact on visibility” is modeled on any act or regulation. Please also comment whether “Federal Class I area” needs to be defined or include a citation to a specific federal regulation that address Federal Class I areas.

The definition of “Adverse impact on visibility” in Section 204.220 is modeled after the definition of the same in 40 CFR 52.21(b)(29).

A separate definition of “federal Class I area” is not necessary. Section 204.920(a) identifies these areas. It provides that “[a]ll of the following areas which were in

existence on August 7, 1977, shall be Class I areas and may not be redesignated: 1) International parks, 2) National wilderness areas that exceed 5,000 acres in size, 3) National memorial parks which exceed 5,000 acres in size, and 4) National parks which exceed 6,000 acres in size.” This language mirrors the language in 40 CFR 52.21(e)(1) and is consistent with the approach to identification of federal Class I areas in 40 CFR 52.21.

However, the further scrutiny of Section 204.920 triggered by this question has revealed a flaw in this section. As proposed, Sections 204.920(b) and (c) would provide that certain areas “...may be redesignated as provided for in this Part” (emphasis added). This language is based on the language of 40 CFR 52.21(e)(2) and (3), as well as 40 CFR 51.166(e)(2) and (3) and is appropriate as applied to redesignations of areas within Illinois. However, this language does not accommodate the redesignations of areas that may take place in other states, including the states neighboring Illinois. Those redesignations would not be made by those states under Part 204 but under the provisions of their own USEPA-approved state PSD programs. While Section 204.920 would not restrict any states from redesignating areas under their PSD program, it would preclude reliance on those new designations of areas for purposes of Part 204. This would not be appropriate because it means that Part 204 would not properly serve to prevent significant deterioration of air quality in any state-designated Class I areas outside of Illinois from new major stationary sources or major modifications in Illinois. There are potentially several ways that this could be addressed. For example, Part 204 could refer to the applicable state SIPs to identify areas outside of Illinois that have been redesignated under the PSD program. Those SIPs would identify the USEPA-approved state redesignations of areas that are relevant to PSD permitting both in the states in which the areas are located and in Illinois pursuant to Part 204.

At hearing, the Illinois EPA indicated it would be considering possible ways to revise Part 204 to address this issue and would submit a recommended approach in its written comments to the Board. Because of the shutdown of USEPA, the Illinois EPA was not able to consult with USEPA on this matter. However, further review by the Illinois EPA suggests that there are not currently Class I Areas in other states that need to be considered as part of this rulemaking. As such, it would be reasonable for Part 204 to simply address the procedural requirements for redesignation by the State of Illinois of area(s) to Class I, as provided for by 40 CFR 51.166(g).

This is because a review of information for State Implementation Plans (SIPs) in the Code of Federal Regulations shows that only one of the States adjacent to or near Illinois has actually redesignated an area to Class I under the PSD program. As codified by 40 CFR 52.2581(f), the State of Wisconsin has redesignated the Forest County Potawatomi Community Reservation near Crandon in northern Wisconsin to Class I under its PSD program. However, this area is over 300 kilometers from the Illinois and Wisconsin border. As such, it is not appropriate to expect that a proposed major project in Illinois would have impacts on this area that would

warrant a specific analysis under the PSD program. In this regard, Wisconsin has identified 300 kilometers as the distance beyond which impacts on a Class I are unlikely.¹⁶ For a very large project proposed for northern Illinois, review of impacts on Class I areas could also be required as the project would potentially affect mandatory federal Class I areas to the north of Illinois, i.e., the Rainbow Lake Wilderness Area and the wilderness area in the Seney National Wildlife Reserve outside of Germfask, Michigan. Finally, as a general matter, compliance with applicable requirements for Class II Areas under the PSD program will adequately serve to protect Class I Areas that are located far from a proposed project.

The other states that were included in the Illinois EPA review, which have not redesignated any areas to Class I, are listed below. These states are either adjacent to Illinois or within 300 kilometers of the nearest border of Illinois. For States other than Missouri, the approval of a State Class I area by USEPA, is not shown under provisions of the CFR that address the SIPs of individual states that are entitled "Significant Deterioration of Air Quality." (The USEPA's approval of a State Class I Area in Wisconsin is shown in the CFR under such a provision.) For the State of Missouri, the approval of a Class I Area is not shown in the listing of the various provisions of the Missouri's rules that have been approved as part of Missouri's SIP.

State	Location	SIP Provision
Alabama	Nearby	40 CFR 52.60
Arkansas	Nearby	40 CFR 52.181
Indiana	Adjacent	40 CFR 52.793
Iowa	Adjacent	40 CFR 52.233
Kentucky	Adjacent	40 CFR 52.931
Michigan	Adjacent	40 CFR 52.1180
Minnesota	Nearby	40 CFR 52.1234
Mississippi	Nearby	40 CFR 52.1280
Missouri	Adjacent	40 CFR 52.1320
Ohio	Nearby	40 CFR 52.1884
Tennessee	Nearby	40 CFR 52.2233

21. In Section 204.230(c) please explain what you mean by "including those with a future compliance date."

The proposed definition of "allowable emissions" in Section 204.230 is modeled

¹⁶ Wisconsin Department of Natural Resources, "Wisconsin Counties within 300 km of Class I Area," <https://dnr.wi.gov/topic/AirPermits/documents/300kmClass1Areas.pdf>

after the definition of the same in 40 CFR 52.21(b)(16). In its entirety, the clause that is the subject of this comment is "The applicable SIP emissions limitation, including those with a future compliance date." When evaluating the net change in emissions from a proposed project, the role of the subject phrase is to prevent a source from inappropriately determining contemporaneous decreases in emissions from current levels of emissions that are higher than relied upon in the applicable SIP. This role is most readily illustrated by an example. Assume that a source has an emission unit that currently emits 10.0 pounds of a pollutant per hour. A new rule that limits emissions to 2.0 pounds per hour has been adopted by the state and approved as part of its SIP. The new rule has a future compliance date, providing subject sources with up to two years to install additional emission control equipment or make other changes to meet the new, lower emission standard. When evaluating the net change in emissions from a proposed project to show that the project is not major modification, the source may not receive credit for the decrease in emissions of this emissions unit that is required by this new rule. Subject to other applicable requirements for an evaluation of the net change in emissions from a proposed project, the source could receive credit for a decrease in emissions from this unit only to extent that future emissions will be less than 2.0 pounds per hour.

22. In Section 204.250(b)(2), please clarify whether the phrase "constructed in the state" refers to construction in Illinois. If not please explain how this provision would apply to any construction in another state.

In the context of Part 204, the phrase "constructed in the state" in Section 204.250(b)(2) refers to a major stationary source or major modification constructed in the State of Illinois. However, this wording reflects language in 40 CFR 51.166 and 52.21 which generally addresses the sizes of areas for which designations of attainment and nonattainment status may be made.

23. In Section 204.290, please comment on whether the publication, "Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U. S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively)", must be incorporated by reference in Section 204.100. If so, please provide a copy for incorporation.

The Illinois EPA agrees that this publication should be incorporated by reference in Section 204.100 and, in conjunction with this filing, is providing a copy of this publication for the Board. See attached Exhibit C.

24. In Section 204.300, please clarify what constitutes a "significant reduction" when it comes to the application of clean coal technology. Please provide examples. Would it be possible to specify a percent reduction in air emissions to quantify as "significant reductions"?

As a practical matter, the clarification that is requested for the definition of “clean coal technology” in Section 204.300 is not necessary. This is because the provisions in Part 204 that use this term reasonably circumscribe its meaning. In this regard, this term is only directly used in Part 204 in three other definitions, “Clean Coal Technology Demonstration Project” (Section 204.310) and “Temporary Clean Coal Technology Demonstration Project” (Section 204.710), and “Repowering” (Section 204.630).

Among other things, the definition of clean coal technology demonstration project provides that such projects must use funds appropriated by the Department of Energy or USEPA, with the federal funds being at least 20 percent of the total project cost. This provides objective criteria for the meaning of clean coal technology in the context of both clean coal technology demonstration projects and temporary clean coal technology demonstration projects. To qualify as a clean coal technology demonstration project, either the US Department of Energy or USEPA must find that the potential benefits of a planned project are worthy of substantial federal funding. In other words, the US Department of Energy and USEPA will through their official actions identify any planned projects in Illinois that would qualify as use of clean coal technology.

The definition of repowering also circumscribes the meaning of clean coal technology in this context. As related to repowering, clean coal technology means replacement of an existing coal-fired boiler with one of a number of listed technologies, i.e., atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells. Clean coal technology would also include other technologies as determined by the Administrator of USEPA, in consultation with the US Department of Energy. Accordingly, if a planned coal-fired boiler replacement project in Illinois would not involve a conversion to one of the listed technologies, the USEPA would determine whether the planned technolog(ies) would constitute use of clean coal technology. The relevant criteria for USEPA to make this determination would be whether the planned technolog(ies) “... are capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.”

It should also be emphasized that the definition of “clean coal technology” in 40 CFR 52.21(b)(34), as well as 40 CFR 51.166(b)(33), which are restated in Section 204.300 both include the phrase “significant reductions in air emissions.” As such, any changes to the wording of Section 204.300 that attempts to clarify this phrase would only be approved by USEPA as part of a SIP revision for a State PSD program for Illinois if it can be shown that the result is more stringent or at least as stringent as the federal definition. In this regard, 40 CFR 51.166(b) provides:

Definitions. All State plans shall use the following definitions for the purposes

of this section. Deviations from the following wording will be approved only if the State specifically demonstrates that the submitted definition is more stringent, or at least as stringent, in all respects as the corresponding definitions below:

25. In Section 204.550(e)(2), the term “enforceable” is used without any qualifier like “legally” or “practicably”, as used in Section 204.560. Please explain the proposed intent of the different types of enforcement, i.e. “legally enforceable” or “practicably enforceable” or just “enforceable”, in Sections 204.550(e)(2) and 204.560.

In the definition of “Net Emissions Increase” being “enforceable as a practical matter” is one of the criteria that must be met for an emissions decrease to be creditable for purposes of netting. The use of this phrase is consistent with the use of the same phrase in 40 CFR 52.21(b)(3)(vi)(b). In this context, it is sufficient that emission decreases be enforceable as a practical matter. First, the usage of this phrase is independent of the emission limitations and, in particular, the term potential to emit. Second, emissions decreases may involve actions that are inherently enforceable as a legal matter such as the shutdown of emission units. In the context of netting, a simpler construct for enforceability of decreases is reasonable compared to the approach that is now present in certain other provisions of the PSD rules that deal with limitations.

As related to “limitations,” under the PSD program, limitations are to be both “legally enforceable” and “practically enforceable.” The different ways these terms, and, a related term, “federally enforceable” are used in various provisions reflects the evolution of the PSD program over time. Effectively, the PSD program began with provisions that indicated that limitations should be federally enforceable, i.e., enforceable by USEPA either directly or indirectly through a provision of a State SIP or a condition in a construction permit issued under the provisions of a State SIP. See, Section 204.400.

This has evolved in two ways. It is now recognized that limitations established by a State or local permitting authority may be sufficient even if USEPA itself cannot enforce them. Second, the nature or “quality” of limitations is relevant if limitations are to be relied upon for purposes of PSD. Most significantly, USEPA concluded that it was not appropriate to consider a provision that simply restricted the annual emissions of a source to be enforceable. It is also necessary for limitation that are to be relied upon under the PSD program to be developed in a way that compliance could be verified in practice and enforcement could be reasonably undertaken for any violations.

This is a topic that has been the subject of a number of USEPA guidance documents. See, *Guidance on Limited Potential to Emit in New Source Permitting*, dated June 13, 1989. Accordingly, the definition of potential to emit, Section 204.560 provides determining potential emission limitations may be either

“federally enforceable” or “legally and practicably enforceable by a state or local air pollution control agency.”

As related to the expansion of the definition of potential to emit to include “non-federal limits,” in 1995, the D.C. Circuit found on two occasions that the USEPA exceeded its authority when it determined that only federally enforceable emission limitations should be considered to restrict a source’s potential to emit. The first such decision involved the hazardous air pollutant programs under Section 112 of the CAA where the court ultimately found that the USEPA failed to demonstrate the existence of Congressional intent to disregard state limitations in any determination of major source status. *National Mining Association v. EPA*, 313 U.S. App. D.C. 363, 59 F.3d 1351 (D.C. Cir. 1995). In a subsequent briefly worded decision relying on *National Mining*, the D.C. Circuit vacated and remanded the “potential to emit definition” in the PSD and NaNSR regulations to the USEPA. *Chemical Manufacturers Association, et al. v EPA*, No. 89-1514 (D.C. Cir. September 15, 1995).

Given these decisions, USEPA issued guidance interpreting how the definition of “potential to emit” should be read. “The term ‘federally enforceable’ should now be read to mean ‘federally enforceable or legally and practicably enforceable by a state or local air pollution control agency.’” *Release of interim Policy on Federal Enforceability of Limitations on Potential to Emit from John S. Seitz, Director, Office of Air Quality Planning and Standards, to Regional Office Addressees*, dated January 22, 1996. More recently, a federal district court agreed that the relevant criterion in a determination of a source’s potential to emit is whether a limitation is “enforceable by a governmental entity.” *United States of America v. Questar Gas Management Company*, No. 2:08-CV-167 TS (District of Utah, Central Division, May 11, 2011).

As a result of *Chemical Manufacturers Association*, the USEPA no longer calls for emission reductions to be “federally enforceable” in determining “potential to emit” but rather considers whether the emission reduction is “legally and practically enforceable.” In this regard, USEPA while agreeing that a limitation did not need to be “federally enforceable,” also considered it necessary to specifically state that such limitations needed be both practically enforceable, as well as legally enforceable.

It is also noteworthy that in certain documents, the USEPA has used the term “enforceable as a practical matter” as meaning “legally and practically enforceable.” For example, in the 1989 guidance document referenced above, USEPA recognized that the term “federally enforceable” refers to both the definition of “federally enforceable” at 40 CFR 52.21(b)(17) and to the concept of “enforceable as a practical matter.” *See, Guidance on Limited Potential to Emit in New Source Permitting*, at page 2, dated June 13, 1989 (“The second criterion [enforceable as a practical matter] is an implied requirement of the first criterion

[federally enforceable}. A permit may purport to be federally enforceable, but, in reality cannot be federally enforceable if it cannot be enforced as a practical matter.”).

Again, in 1995, USEPA clarified that federal enforceability had two components. “The concept of federal enforceability incorporates two separate fundamental elements that must be present in all limitations on a source’s potential to emit. First EPA must have a direct right to enforce restrictions and limitations imposed on a source to limit its exposure to Act programs... Second, limitations must be enforceable as a practical matter.” *Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act (Act)*, pages 2-3, dated January 25, 1995.

More recently USEPA has concluded that “enforceable as a practical matter” necessarily encompasses legal enforceability. In the context of the federal NSR program for Indian country, the phrase “enforceable as a practical matter” was defined by USEPA in a 2011 rulemaking to mean as follows:

Enforceable as a practical matter means that an emission limitation or other standard is both legally and practicably enforceable as follows:

- (1) An emission limitation or other standard is legally enforceable if the reviewing authority has the right to enforce it.
- (2) Practical enforceability for an emission limitation or for other standards (design standards, equipment standards, work practices, operational standards, pollution prevention techniques) in a permit for a source is achieved if the permit's provisions specify:
 - (i) A limitation or standard and the emissions units or activities at the source subject to the limitation or standard;
 - (ii) The time period for the limitation or standard (e.g., hourly, daily, monthly and/or annual limits such as rolling annual limits); and
 - (iii) The method to determine compliance, including appropriate monitoring, recordkeeping, reporting and testing.
- (3) For rules and general permits that apply to categories of sources, practical enforceability additionally requires that the provisions:
 - (i) Identify the types or categories of sources that are covered by the rule or general permit;
 - (ii) Where coverage is optional, provide for notice to the reviewing authority of the source's election to be covered by the rule or general permit; and
 - (iii) Specify the enforcement consequences relevant to the rule or general permit.

40 CFR 49.152(d) and 49.167; see also, 76 Fed. Reg. 38748 (July 1, 2011).

26. In Section 204.560, would it be acceptable if the phrase “by a state or local air pollution control agency” is replaced by the “Agency”?

In Section 204.560, the phrase “by the “Agency” should not be substituted for the phrase “by a state or local air pollution control agency.” The current phrase is consistent with relevant USEPA guidance. See, *Release of Interim Policy on Federal Enforceability of Limitations on Potential to Emit from John S. Seitz, Director, Office of Air Quality Planning and Standards, to Regional Office Addressees*, dated January 22, 1996. (“The term ‘federally enforceable’ should now be read to mean ‘federally enforceable or legally and practicably enforceable by a state or local air pollution control agency.’”) For additional discussion on this matter, refer to pages 53 and 54 of the Statement of Reasons.

27. In Section 204.570, please add a citation for the italicized text. Please also remove italics from the portion of the text that is added by IEPA and is not based on a statutory authority.

Section 204.570 is based on the definition of “Prevention of significant deterioration (PSD) permit” in the Environmental Protection Act, 415 ILCS 5/3.363. In the Illinois EPA’s proposal, the term “Illinois EPA” was substituted for “Illinois Environmental Protection Agency.” The phrase “Section 9.1(c) of the Act” was substituted for “subsection (c) of Section 9.1.” The term “USEPA” was substituted for the “United States Environmental Protection Agency.” The term “Illinois SIP” was substituted for the “Illinois State Implementation Plan.”

In response to this question, a revised definition for PSD permit, as provided below, would be acceptable:

Section 204.570. Prevention of Significant Deterioration (PSD) Permit *means a permit or the portion of a permit for a new major source or major modification that is issued by the Illinois EPA under the construction permit program pursuant to Section 9.1(c) of the Act that has been approved by the USEPA and incorporated into the Illinois SIP to implement the requirements of Section 165 of the Clean Air Act and 40 CFR 51.166. [415 ILCS 5/3.363]*

28. The definition of “Major Modification” under Section 204.490 applies to significant emissions increase of a “Regulated NSR Pollutant (as defined in Section 204.610) other than GHGs (as defined in Section 204.430)”. Please clarify whether the definition of “Regulated NSR Pollutant” under Section 204.610 includes GHGs. If so, under what subsection are they covered in Section 204.210?

The definition of regulated NSR pollutant in Section 204.610 includes GHGs. GHGs are a regulated NSR pollutant pursuant to Section 204.610(d) as GHGs are a pollutant that is otherwise “subject to regulation,” as that term is defined in Section

204.700. In this regard, Section 204.700 specifically states that “Pollutants subject to regulation include, but are not limited to, GHGs as defined in Section 204.430.”

As GHGs are a regulated pollutant, emissions of GHGs would, in the appropriate circumstances, be addressed by all of the subsections in Section 204.210, which defines the term “actual emissions.”

Incidentally, as observed by this question, GHG emissions are not considered when determining whether a proposed project would be a major modification. This determination and the determination whether a proposed new source is a major source would be made based on the emissions of regulated NSR pollutants other than GHGs from the proposed modification or new source. However, if a proposed modification of a new source would be major under the PSD permit program for emissions of a regulated NSR pollutants other than GHGs, it may also be subject to PSD for its emissions of GHGs. For example, for a major new source, Section 204.1100(b), which addresses the PSD requirement for Best Available Control technology (BACT), provides that “A new major source shall apply BACT for each regulated NSR pollutants that it would have the potential to emit in significant amounts.” As such, once a proposed new source is major for a regulated NSR pollutant other GHGs, the BACT requirement also applies to the source for other regulated NSR pollutant(s) for which the source’s emissions are significant. This would include the source’s emissions of GHGs if its potential GHG emissions were significant, i.e., 75,000 tons or more per year, as carbon dioxide equivalents.

29. In Section 204.660, please explain why for some pollutants rates are listed in tpy and for others in megagrams per year. Comment on whether all rates can be listed in tpy.

As observed by this question, the significant emission rates for certain pollutants are expressed in megagrams per year with “equivalent” emission rates in parentheses that are expressed in tons per year. This is because this is the form in which the USEPA adopted significant emission rates for these pollutants under the PSD program.

For these pollutants, it would be problematic to only express the significant emission rates in tons per year. This is because the emission rates in megagrams per year and tons per year are actually slightly different. For example, for municipal solid waste landfill emissions, the significant emission rate of 45 megagrams per year is actually equivalent to 49.60 tons per year, not 50 tons per year as indicated in parentheses in 40 CFR 52.21(b)(i). On the other hand, for municipal waste combustor metals, the significant emission rate of 14 megagrams is actually equivalent to 15.43 tons per year, not 15 tons per year. Simply setting significant emission rates for these pollutants at the values in tons per year would affect the stringency of Part 204 compared to 40 CFR 52.21(23)(i).

SUBPART E: STACK HEIGHTS

30. Please clarify whether subsection 204.1000(a) requires that the degree of emission limitation must not be affected by stack height of any source exceeding good engineering practice under Section 204.420. If so, please provide amended rule language under Section 204.1000 to reflect the proposed intent.

As generally indicated in this question, Section 204.1000(a) would require that the degree of emission limitation required for control of pollutants under Part 204 must not be affected by stack height of any source as exceeds “good engineering practice.” The term “good engineering practice” is defined at Section 204.420. This term is not used anywhere in Part 204 with a meaning other than the one provided in Section 204.420. As such, it unclear what clarification is being suggested by the Board.

**SUBPART F: REQUIREMENTS FOR MAJOR STATIONARY SOURCES
AND MODIFICATIONS**

31. Please comment on whether the term “significant amounts” in Section 204.1100(b) need to be followed by the phrase “as defined in Section 204.660”.

The addition of the suggested phrase is acceptable to the Illinois EPA.

32. In Section 204.1110(a), please explain what “air quality control region” means. Comment on whether that term needs to be defined under Subpart B of Part 204.

The term “air quality control region” does not need to be defined in Part 204 for approval of Part 204 by USEPA. This is because there is not a definition for this term in 40 CFR 52.21 or 51.166. However, as defined 40 CFR 51.100(m), “the term *Region* means an area designated as an air quality control region (AQCR) under section 107(c) of the [Clean Air] Act.” For purposes of Part 204, this definition could be appropriately adapted if the Board determines that this term should be defined. For example, “Air Quality Control Region” means an air quality control region as designated by USEPA under Section 107(c) of the Clean Air Act.

However, the further scrutiny of Section 204.1110 triggered by this question has revealed a flaw in this section. As proposed, Sections 204.1110 would provide that a demonstration shall be made that “allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions. . . would not cause or contribute to air pollution in violation of (a) [a]ny NAAQS in any air quality control region; or (b) [a]ny applicable maximum allowable increase over the baseline concentration in any area.” (emphasis added). This language is based on the language of 40 CFR 52.21(l), as well as 40 CFR 51.166(k). However, this language could be interpreted to mean that the demonstration need only show that the project’s emissions increases would not cause or contribute to a violation of either the NAAQS in any air quality control region or the applicable maximum allowable increase over the baseline

concentration in any other rather than both. As confirmed most recently by Michigan's SIP-approved PSD rules, the demonstration must show that the project's emissions increases would not cause or contribute to a violation of either the NAAQS in any air quality control region and the applicable maximum allowable increase over the baseline concentration. *See, Michigan's Air Pollution Control Rules, Part 18, PSD, Rule 336.2811, Source Impact Analysis; see also, 2006 MR 23, effective December 4, 2006. The Illinois EPA would propose deleting this "or" in Section 204.1110.*

33. In subsection 204.1110(b), does "maximum allowable increase" refer to the levels set forth at Sections 204.900 or 204.1200? If so, would it be appropriate to include a cross- reference to those sections in subsection (b)?

The addition of the suggested cross-references is acceptable to the Illinois EPA. The Illinois EPA would propose that 204.1110(b) read as follows:

Any applicable maximum allowable increase as set forth in Section 204.900 and/or Section 204.1200, as applicable, over the baseline concentration in any area.

SUBPART H: OBLIGATIONS OF IEPA

34. Section 204.1330 requires IEPA to issue or deny a permit within one year after receipt of a "complete application."

- a. Please clarify whether IEPA will issue a notification to the applicant indicating the date on which IEPA determined the application to be complete.

Section 204.1300, Notification of Application Completeness to Applicants, requires the Illinois EPA to notify the applicant within 30 days of receipt of an application for a permit pursuant to Part 204 as to the completeness of or deficiency in the application.

- b-1. Please comment on whether Section 204.1300 should require a complete application notification that starts the one-year clock?

Section 204.1300, Notification of Application Completeness to Applicants, already requires the Illinois EPA to notify the applicant within 30 days of receipt of an application for a permit pursuant to Part 204 as to the completeness of or deficiency in the application.

- b-2. As a follow-up to the Board's Prefiled Question 34, Hearing Officer Rabczak asked the Agency, "So would IEPA consider that—the date of notice, the date on the [Notification of Application Completeness], to be the start of the one year period [for the Agency to issue or deny a permit]." 11/27/18 TR at 115-116.

For an application that has been determined to be complete, the date of the Notification of Completeness pursuant to Section 204.1330 would generally begin the one-year period for the Agency to grant or deny a PSD permit. However, this would not always be the case. First a determination of completeness is necessarily made considering the rules and circumstances that are applicable for the proposed project at the time that the determination is made. Changes to those rules and circumstances could result in a complete application becoming incomplete. For example, adoption of a new NAAQS or redesignation of an area from nonattainment to attainment for a pollutant could result in an application no longer being complete as requirements of PSD were not addressed for a pollutant, e.g., VOM or SO₂. *Sierra Club et al. v. Jackson*, No. 11-73342, slip op. at 6 (9th Cir., August 12, 2014) (the Clean Air Act “unambiguously requires Avenal Power to demonstrate that . . . [it] . . . complies with the regulations in effect at the time the Permit is issued”).

Second, a determination of completeness is necessarily made on the material that an applicant has submitted. If the applicant proposes substantial changes to the project or discovers materials errors in the application, and submits changes to the application, the Agency’s original notification of completeness would no longer address the revised application. A new notification of completeness would be needed to reestablish the one-year deadline for the Agency to either grant or deny a PSD permit.

Third, applicants for PSD permits occasionally request that the review of permit applications be suspended. Such requests are routinely honored and stop the one-year review clock.

It is also appropriate to remember that many PSD projects are complex and controversial, requiring detailed technical review, extensive interaction with the applicants, and further investigation to properly respond to public comments. Even after a careful completeness determination has been made, an applicant should expect that it will need to supplement its application with additional information as requested by the permitting authority, to enable the review and processing of the application to continue.

- c-1. Also comment on whether the applicant has any recourse if the Agency does not take any action within a year after the receipt of the complete application.

Proposed Section 105.604(b) would address the appeal rights of the applicant to the Board if the Illinois EPA fails to act on an application for a PSD permit within one year of submittal of a complete PSD application. *Accord.*, 415 ILCS 5/40/3(a)(1) (“If the Agency fails to act on an application for a PSD permit within the time frame specified in paragraph (3) of subsection (f) of Section 39 of this Act, the applicant may, before the Agency denies or issues the final permit, petition for a

hearing before the Board to compel the Agency to act on the application in a time that is deemed reasonable.”).

- c-2. Mr. Grable asked the Agency, “So on page 78 of the Statement of Reasons, Illinois EPA is proposing the following language for Section 204.1330, quote, within one year after receipt of a complete application a permit shall, emphasis added, be granted or denied by the Illinois EPA and in proposed Section 105.606(b) the text -- the proposed section is, quote, if the permit applicant wishes to appeal the Agency's failure to act on an application for a PSD permit within the timeframe specified in Section 39(f)(3) of the act, the person must file a petition for review with the clerk before the Agency denies or issues the final permit. My first question is, in practice, wouldn't proposed Section 105.606(b) act to give the Illinois EPA greater than one year to grant a permit so long as the applicant doesn't immediately file an appeal based on the Agency's inaction?” 11/27/18 TR at 117-118.

First, Section 204.1330 would require the Agency to grant or deny a PSD permit within one year of submittal of a complete application. Second, the language of proposed Section 105.604 and 105.606(b) is consistent with the Section 40.3(a)(1) of the Act providing that in the event that the Agency fails to act on a PSD permit application within the time frame specified in Section 39(f)(3) of this Act, the applicant *may*, before the Agency denies or issues the final permit, petition for a hearing before the Board to compel the Agency to act on the application in a reasonable time. (*emphasis added*). Third, as a general matter, it should not be expected that permit applicants would routinely give the Agency greater than a year to act on a complete application unless a project is put “on hold.” Given construction of a major stationary source cannot commence until permit applicants are in receipt of a construction permit, permit applicants would have every incentive to ensure receipt of a timely construction permit from the permitting authority. See, CAA §165(a) (new major source construction cannot begin prior to receiving a final permit). Lastly, as the permit applicant is most directly affected by any failure of the Agency to take action in a timely manner, it is appropriate that a permit applicant decide how to proceed, i.e., to file an appeal, or by not providing an appeal, to provide the Agency with additional time to act.

- c-3. Mr. Grable asked the Agency, “What does this mean in regards to the requirement in proposed Section 204.1330, which was based on Section 39(f)(3) of the Illinois Environmental Protection Act as well as Section 165(c) of the Clean Air Act which requires a final permitting decision within one year of receipt of a complete application for a PSD permit.” 11/27/18 TR at 118-119.

As observed by the prior discussion, this language is consistent with Section 40.3(a)(1) of the Act providing “[i]f the Agency fails to act on an application for a PSD permit within the time frame specified in paragraph (3) of

subsection (f) of Section 39 of this Act, the applicant *may, before the Agency denies or issues the final permit, petition for a hearing before the Board to compel the Agency to act on the application in a time that is deemed reasonable.* (emphasis added).

- c-4. Mr. Grable asked the Agency, "Question 3 starts out with a scenario. Say that Illinois receives a complete application and they do not grant or deny a permit within one year and the applicant doesn't immediately file for appeal. In theory, wouldn't this scenario be able to continue for an indefinite amount of time until Illinois EPA issues a decision or the applicant files an appeal?" 11/27/18 TR at 119.

This scenario described in this hypothetical is theoretically possible. However, as discussed it is not likely unless the applicant places the application "on hold."

- c-5. Mr. Grable asked the Agency, "Could the Illinois EPA explain how this would conform with the proposed Section 204.1330 -- or would this conform with the requirements found in section -- proposed Section 204.1300 Section 39(f)(3) of the act and Section 165(c) of the Clean Air Act which requires -- or which mandates an Illinois EPA permit decision within one year after receipt of a complete application for a PSD permit." 11/27/18 TR at 119-120.

The theoretical situation put forward in this comment would not conform with Section 204.1330. However, it would conform with the tolling authorized by Section 40.3(a)(1) of the Act providing that in the event that the Agency fails to act on a PSD permit application within the time frame specified in Section 39(f)(3) of this Act, the applicant *may, before the Agency denies or issues the final permit, petition for a hearing before the Board to compel the Agency to act on the application in a reasonable time.* (emphasis added).

This approach is generally consistent with principles of administrative law that provide that provisions such as Section 204.1330 be accompanied by means by which an aggrieved party can seek action by an administrative agency. By way of analogy, if the Board were to fail to take final action on a petition for review of an Agency final action pending before it within 120 days after receipt, the petitioner is entitled to an Appellate Court order. 415 ILCS 5/40(a)(3) and 40.2(c). Similarly, in those instances where the USEPA Administrator fails to grant or deny a petition for review of a Title V permit issued by a state or local permitting authority within the timeline for USEPA action, i.e., 60 days of the petition's filing,¹⁷ the petitioner may file suit to seek

¹⁷The Clean Air Act and accompanying regulations set forth a timeline for state and USEPA action during the processing of a permit pursuant to Title V of the Clean Air Act. Before issuing a Title V permit or making a significant modification to a Title V permit, the permitting authority is required to provide the public at least 30 days to comment on the draft Title V permit. 42 USC

agency action. *New York Public Interest Research Group v. Whitman*, 321 F.3d 316, 323 (2d Cir. 2003), citing *NYPIRG v. EPA*, No. 00-9394 (S.D.N.Y.); see also, *WildEarth Guardians v. Jackson*, District Court, District of Colorado, No. 09-cv-01964-MSK-MEH.

- c-6. Mr. Grable asked the Agency, “What is Illinois EPA's reasoning for not considering a permit to be denied if a decision is not reached within one year, thus allowing Illinois EPA to comply with all of the requirements found in proposed Section 204.1330, Section 39(f)(3) of the act as well as Section 165(c) of the Clean Air Act?” 11/27/18 TR at 120.

Neither the Clean Air Act or the Illinois Environmental Protection Act provide that a permit shall be considered to be denied if the Agency does not take action within one year of receipt of a complete permit application. In particular, Section 39(f)(3) merely provides that the Agency shall grant or deny a complete permit application not later than one year after the filing of the complete application. Section 39(f)(3) does not provide that if final action is not taken by the Agency within one year after the filing of a complete application, the permit shall be deemed denied or, for that matter, issued. This is appropriate as permit action under the PSD program should not occur as a result of the permitting authority's failure to act in a timely manner.

This is consistent with the stated practice of the USEPA. See, *USEPA's Timely Processing of Prevention of Significant Deterioration (PSD) Permits when EPA or a PSD-Delegated Air Agency Issues the Permit*, pg. 8, dated October 15, 2012 (“The Regional Office may put on hold the review of the permit application and consider it inactive, but should not do so unless the Regional Office obtains a written request from the permit applicant.”). Notably, if the applicant would like to reactivate review of the application, the applicant needs to discuss this with the permitting authority which necessarily includes a discussion on whether any additional information is necessary. *Id.* Most significantly, if the project is reactivated, it must meet the applicable requirements at the time of permit issuance. *Id.* In addition, USEPA guidance also provides that “absent a written request by a permit applicant to suspend review of an application, the Regional Office should proceed toward a decision on a permit application without delay.” *Id.* at pg. 9.

7661a(b)(6); 40 CFR 70.7(h). The permitting authority must then submit a proposed Title V permit to the USEPA for its review. 42 USC 7661(d)a; 40 CFR 70.8(d). After receiving the proposed permit, the USEPA has 45 days to object to the permit. 42 USC 7661d(b)(1); 40 CFR 70.8(c). At the close of the USEPA's 45-day period, if the USEPA has not objected to the proposed permit, any person may petition the USEPA to object to the permit. 42 USC 7661d(b)(2). This petition is to be brought within 60 days of the close of USEPA's 45-day review period. 42 USC 7661d(b)(2); 40 CFR 70.8(d). The USEPA is to either grant or deny this petition within 60 days of filing. 42 USC 7661d(b)(2).

- 35-a. Section 204.1340(d) requires IEPA to post a notice of the rescission determination on a public web site identified by IEPA within 60 days of the rescission. Please clarify what criteria will the Agency use to identify the website to post the rescission notice.

As a general matter, in 2016, the USEPA found that electronic notice by means of e-mail or “e-notice” shall be the primary form of public notice for New Source Review permit programs of the Clean Air Act. 81 Fed. Reg. 71613 (October 18, 2016). USEPA went on to address the website at which documents must be posted and available for access by the public during public comment periods, stating the following:

In order to satisfy the requirement for e-access when e-notice is provided, the permitting authority shall electronically post, for the duration of the public comment period, the draft permit on a publicly accessible Web site identified by the permitting authority, which may include the permitting authority’s public Web site, an online state permits register, or a publicly-available electronic document management Web site that allows for downloading documents.

81 Fed. Reg. 71613, 71616.

In this rulemaking, the USEPA also stated that the public shall be notified of permit rescissions by e-notice with the notice of rescissions posted on the same website that the permitting authority uses to post documents for public comment periods on draft permits. This was required as USEPA found that each permitting authority should have a single, consistent noticing method for all subject notices to avoid confusion.

- 35-b. As a follow-up question to the Board’s Prefiled Question 35, Agency agreed to identify the website where e-notice of permit rescission determinations will be posted. 11/27/18 TR at 122.

At this time, permit rescission determinations by the Illinois EPA will be posted on the following website. As with any website, the location of this website could change in the future.

<https://www2.illinois.gov/epa/public-notice/boa-notice/Pages/archive.aspx>

SUBPART J: INNOVATIVE CONTROL TECHNOLOGY

36. Section 204.1500(b)(4) requires IEPA to ensure that the source or modification would not before the date specified by IEPA cause or contribute to a violation of an applicable NAAQS. Please comment on whether IEPA needs to ensure that the source or modification does not also cause or contribute to a violation of any maximum allowable increase.

Section 204.1500(b) accurately reflects the requirements of the federal PSD permit program. The provisions of 40 CFR 52.21(v) that address “innovative control technology” do not require that the use of such control technology does not result in exceedances of the applicable PSD increments during the demonstration period that may be authorized for such technology under the PSD program. However, the use of such control technology cannot be authorized if it would impact an area where an applicable increment is known to be violated. (Refer to 40 CFR 52.21(v)(iv)(b).)

In this regard, it is relevant that the term “innovative control technology” is a term of art under the PSD program. It is specifically defined by 40 CFR 52.21(b)(19).

***Innovative control technology* means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.**

Then, as observed in this question, the alternative provisions of the PSD program related to use of innovative control technology are not available if the applicant cannot show that the use of such technology would not cause or contribute to a violation of any applicable NAAQS (40 CFR 52.21(v)(2)(iv)(a)). As such, public health and welfare must be protected during the demonstration period.

In addition, as the provisions-for use of innovative control technology at most provide for a demonstration period that is between four and seven years in duration, any exceedance of an applicable PSD increment must be temporary. After the conclusion of the demonstration period, the applicable PSD increments may not be violated (40 CFR 52.21(v)(iii).) In this regard, if the innovative control technology fails, a source may be provided with up to three years to meet the PSD requirement for BACT using demonstrated control technology. However, during this further period in which the source is transitioning from innovative to demonstrated control technology, the PSD increments must be met. Emissions must be sufficiently controlled that the applicable PSD increments would not be violated.

SUBPART K: PLANTWIDE APPLICABILITY LIMITATION (PAL)

37. In Section 204.1630, please explain what the Agency means by emission limitations enforceable as a “practical matter.”

Please see the Illinois EPA’s response to Board Question number 25.

38. According to Section 204.1790, the owner or operator of a major stationary source requests a PAL. Please explain the following:

- a. Proposed Section 204.1800(a)(5) provides that each PAL regulates emissions of only one pollutant. Does the owner or operator specify the NSR pollutant that is the subject of the PAL application, or does the application need to address all potential NSR pollutants? Does an application for a PAL under proposed Section 204.1800(a) require producing the calculations of baseline actual emissions for all NSR pollutants, including GHG? *See* Proposed 35 Ill. Adm. Code 204.1790(b).

The owner or operator of the source must specify the PAL pollutant that is being addressed in its application for the PAL permit. The application need not address other pollutants to satisfy the Permit Application Requirements in Section 204.1790.

The application for a PAL requires, among other things, calculations of the baseline actual emissions for the PAL pollutant (with supporting documentation). *See*, 35 Ill. Adm. Code Sections 204.1790(b). Baseline actual emission for the PAL pollutant are also addressed in the Renewal of a PAL and when Increasing the PAL During the PAL Effective Period. *See*, 35 Ill. Adm. Code Sections 204.1860(c)(1) and 204.1870(a)(2).

- b. Proposed Section 204.1800(a) provides that IEPA “is allowed to establish a PAL.”

- i-1. Does that mean that IEPA exercises discretion on whether to grant a PAL application at a major stationary source?

Yes, consistent with 40 CFR 52.21(aa) and 51.166(w), the Illinois EPA will possess discretion on whether to process a PAL application. Consistent with 40 CFR 52.21(aa)(4)(i) and 51.166(w)(4)(i), Section 204.1800(a) proposes the use of the phrase “*is allowed to establish a PAL*”

In addition, this is consistent with the applicability provisions for PALs as proposed in Section 204.1600(a), stating that “The Illinois EPA *may* approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements in this Subpart.” Notably, 40 CFR 52.21(aa)(1)(i) and 40 CFR 51.166(w)(1)(i) provide that the Administrator or the reviewing authority, respectively, “*may* approve the use of an actuals PAL.”

As the term “may” and the phrase “is allowed to” are not imperative, discretion is allowed. It should be noted as well that the Illinois EPA is not aware of any federal caselaw interpreting this phrase as mandatory.

However, the Illinois EPA would not object to alternative wording

that would require action on an application for a PAL permit. The Illinois EPA does not expect that this would prevent SIP approval, as any PAL permit that would be issued would be required to comply with relevant requirements for PAL permits.

- i-2. As a follow-up question to the Board's Prefiled Question 38, Hearing Officer Rabczak asked the Agency, "In Section 204.1800(a), it specifies that IEPA is allowed to establish [a PAL], provided the requirements of the section are met. Does that mean that the requirements listed in this section are not the exclusive list? So to clarify what I'm asking is, even if the applicant meets the requirements, IEPA still has a discretion which means it might look at something else on top of these requirements?" 11/27/18 TR at 129. Ms. Rabczak went on to clarify, "So we have a list of criterias [sic] in Section 204.1800. If the applicant meets those requirements and the Agency is still using its discretion does not grant PAL, what would the Agency reason its decision on? . . . [W]hat other things would the Agency consider when it makes a decision—when it uses its discretion to deny?" 11/27/18 TR at 132.

The Illinois EPA directs the Board to the preceding response.

- i-3. Mr. Klein asked the Agency, "Just to follow-up on the previous response . . . because 'may' is used in other instances to indicate discretionary action, would it be appropriate to change 'is allowed' to 'may' in [Section 204.]1800(a)?" 11/27/18 TR at 130.

Section 204.1800(a) accurately reflects the requirements of the federal PSD program. The provision of 40 CFR 52.21(aa)(4)(i) that addresses the General Requirements for Establishing a PAL makes use of the phrase "is allowed" rather than "may." See, 40 CFR 52.21(aa)(4)(i) (*emphasis added*) ("The Administrator *is allowed* to establish a PAL at a major stationary source. . . "). Meanwhile the provision of 51.166(w)(4)(i) that address the General Requirements for Establishing a PAL makes use of the phrase "allows" rather than "may." See, 40 CFR 51.166(w)(4)(i) (*emphasis added*) ("The plan allows the reviewing authority to establish a PAL at a major stationary source . . .").

However, the Illinois EPA would not object to alternative wording that would require action on an application for a PAL permit. The Illinois EPA does not expect that this would prevent SIP approval, as any PAL permit that would be issued would be required to comply with relevant requirements for PAL permits.

- ii. Does the PAL application limit or narrow the scope of IEPA's review of eligible PAL pollutants? If so, what criteria does IEPA use

in evaluating a PAL permit application and subject PAL pollutants?

The Illinois EPA's review of the application would be limited to those pollutants sought to be covered by the PAL permit. The Illinois EPA would rely on requirements set forth in Part 204, Subpart K, Plantwide Applicability Limitation. For instance, in evaluating the completeness of the application, the Illinois EPA would look to the requirements in Section 204.1790, Permit Application Requirements. In establishing a PAL, the Illinois EPA would look to the requirements of Section 204.1800, General Requirements for Establishing a PAL. In setting any 10-year actual PAL level, the Illinois EPA would look to the requirements of Section 204.1820, Setting the 10-Year Actuals PAL Level. In those instances when a PAL permit is issued, upon evaluating the application and the applicable requirements of Subpart K, the Illinois EPA would issue a permit consistent with Section 204.1830, Contents of the PAL Permit.

iii. Should criteria be included in the proposed amendments?

No. Part 204 Subpart K is consistent with 40 CFR 52.21(aa) and 51.166(w). The requirements of Subpart K would form the basis of any review performed by the Illinois EPA.

c. Under proposed Section 204.670, is a GHG PAL applied only in the event of a "significant emissions increase" of GHG emissions?

No. The owner or operator of a major source would apply for a PAL permit for GHGs or any other regulated NSR pollutant as a preemptive measure so that PSD permits would not be required for possible future projects at the source.

Similar to a PAL for other regulated NSR pollutants, a PAL for GHGs would be established based on the sum of the baseline actual emissions, as defined in Section 204.240, for each emissions unit at the source and the applicable significant emission rate. For GHGs, emissions are to be expressed in terms of carbon dioxide equivalents and the significant emissions rate is 75,000 tons per year, as carbon dioxide equivalents.

39. Section 204.1820(a) provides that "the plan shall provide..." Please clarify whether the "plan" refers to the SIP. If not, please explain the proposed intent.

Yes, the term "plan" in proposed Section 204.1820(a) refers to the SIP.

40. In Section 204.1830, would it be acceptable to IEPA if the proposed subsection (a) is made the preamble and subsections (a)(1) through (a)(10) are renumbered as (a)

through (j) since there is no subsection (b), as proposed?

The proposed revisions to Section 204.1830 is acceptable.

41. In Section 204.1840(a), please clarify whether all PAL permits will have a 10-year effective period, or the 10-year period is the maximum duration. Comment on why 10 years was chosen as the effective PAL period rather than a period such as 5 years that follows the permit cycle.

PAL permits will have a 10-year effective period. This period was chosen to be consistent with 40 CFR 52.21(aa)(4)(i)(f) and 51.166(w)(i)(4)(f).

42. Please clarify whether the reopening of the PAL permit under Section 204.1840(b)(1) is instigated always by IEPA or whether the permittee may request that IEPA reopen the permit.

Reopening of a PAL permit pursuant to Section 204.1840(b)(1) could be initiated by either the Illinois EPA or upon application by the Permittee. For example, Section 204.1840(b)(1)(C) specifies that the Illinois EPA must reopen the PAL permit to revise the PAL to reflect an increase in the PAL as provided under Section 204.1870. Since Section 204.1870(a)(1) requires the owner or operator to submit a complete application to request an increase in the PAL limit, this reopening of the PAL permit would be initiated by the applicant.

Conversely, Section 204.1840(b)(1)(B) specifies that the Illinois EPA must reopen the PAL permit to reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets pursuant to 35 Ill. Adm. Code Part 203. Since the offset generation would occur as part of a new project, the Illinois EPA could initiate reopening of the PAL permit pursuant to Section 204.1840(b)(1)(B).

43. In Section 204.1870(a)(1), please clarify whether a “complete application” for requesting an increase in PAL must meet only the requirements of this section or other permit application requirements of Sections 204.1790 and 1830 apply. Also, comment on whether an approval of PAL increase during the effective period could be treated as a renewal to extend the effective period.

Section 204.1870(a)(1) does not excuse a permit applicant from the requirements of Section 204.1790 so as to have a complete and up-to-date permit application when making a request to increase a PAL during the PAL effective period.

The approval of a PAL increase under Section 204.1870 could not be treated as a renewal to extend the effective period of the PAL. This is because the information required under Section 204.1870 would not necessarily satisfy the requirements for Renewal of a PAL under Section 204.1860. However, nothing in Section 204.1870 forecloses increasing the PAL during the PAL effective period at the same time as a

renewal of a PAL in Section 204.1860.

44. If a PAL is rendered invalid under Section 204.1880(a)(4), please clarify whether the source will be subject to enforcement or whether the Agency will establish allowable emission limitations in revised permit under Section 204.1850.

Section 204.1880 addresses the monitoring that a PAL source must conduct to accurately determine its emissions of the PAL pollutant(s). As such, it is not directly linked to expiration of a PAL without renewal, as provided for by Section 204.1850. As related to Section 204.1880(a)(4), the question that must first be considered is how would it be determined that a PAL permit may have or has been or would be rendered invalid due to failure of a source to use required monitoring. Several scenarios are possible. For example, the source could request early termination of the PAL accompanied by implementation of Section 204.1850. Early termination of the PAL could occur as a result of enforcement for failure of the source to use required monitoring again accompanied by implementation of Section 204.1850. The source could resume the required monitoring, either with or without accompanying enforcement. The source could request revision of the permit to change the monitoring requirements and an appropriately revised permit could ultimately be issued by the Agency. As the approach that would be taken would depend on the specific circumstances and would involve enforcement or the exercise of enforcement discretion, it is not appropriate for the Agency to further speculate on what might occur in different circumstances.

Simplifying and Clarifying Language

45. In Section 101.202, in the definition of "OSFM record", please comment on whether "eligibility and deductible decision" should be replaced by "eligibility and deductibility of the decision."

All proposed revisions to regulations involving programs regulated by OSFM were first discussed between counsel for the Illinois EPA and the OSFM. No such language change was proposed to the Board by the Illinois EPA without first consulting with and obtaining the consent of OSFM. Any revision to this phrase would first need to be discussed with OFSM.

46. Please comment whether the following changes would be acceptable to clarify the proposed language:
- a. Replace "pursuant to" with "under" where appropriate – e.g. in section 101.202 definition of "CAAPP permit"; definition of "PSD permit";

This change is acceptable to the Illinois EPA.

- b. Replacing capital letters with lower case letters in section 101.308(a) in "variances," "permit appeals" and "pollution control facility sitting

review”;

These changes are acceptable to the Illinois EPA. However, the Illinois EPA would note that these same terms are capitalized for purposes of 35 Ill. Adm. Code 101.108(b).

- c. Remove “of this Part” or “of this Subpart” where unnecessary – e.g. Sections 105.602(b); 105.606(a); 105.608(a);

The removal of the suggested phrases is acceptable.

- d. Remove “the requirements of” where unnecessary – e.g. Sections 204.240(b)(3); 204.800(a), (b); 204.850;

To maintain consistency with 40 CFR 52.21 and 51.166, the phrase “the requirements of” should not be removed from Section 204.240(b)(3), 204.800(a) and (b) or 204.850.

The phrase “the requirements of” in Section 204.240(b)(3) is consistent with 40 CFR 52.21(b)(48)(ii)(c) and 51.166(b)(47)(ii)(c).

The phrase “the requirements of” in Section 204.800(a) and (b) is consistent with 40 CFR 52.21(a)(2)(i) and (ii) and 51.166(a)(7)(i) and (ii).

The phrase “the requirements of” in Section 204.850 is consistent with 40 CFR 52.21(r)(4) and 51.166(r)(2).

- e. Replace “shall” with “must” when the rule language relates to an obligation of a person other than the Agency or the Board - e.g. Sections 105.608(a); 204.240(a)(1), (2), and (4);

The replacement of the term “shall” with the term “must” in Part 105 is acceptable to the Illinois EPA.

The replacement of the term “shall” with the term “must” in Part 204 would be inconsistent with the use of the term “shall” in 40 CFR 52.21 and 51.166. For instance, Sections 204.240(a)(1), (2) and (4) are modeled after 40 CFR 52.21(b)(48)(i)(a), (b) and (d) and 51.166(b)(47)(i)(a), (b) and (c). In all instances, the applicable federal regulation employs the term “shall.”

- f. Replace “shall” with “will” when the rule language relates to an obligation of the Agency or the Board – e.g. Sections 204.210(b); 204.240(a); 204.350(b)(2)(C);

The replacement of the term “shall” with the term “will” in Part 204

would be inconsistent with the use of the term “shall” in 40 CFR 52.21 and 51.166. For instance, Section 204.210(b) is modeled after 40 CFR 52.21(b)(21)(ii) and 51.166(b)(21)(ii). Section 204.240(a) is modeled after 40 CFR 52.21(b)(48)(i) and 51.166(b)(47)(i). Section 204.350(b)(2)(C) is modeled after 40 CFR 51.100(hh)(2)(ii)(C). In all instances, the applicable federal regulation employs the term “shall.”

- g. Remove “shall” when unnecessary – e.g. Section 204.260(b)(1) before “mean”;

In this particular instance, this use of the term “shall” may be removed before the term “mean” given this particular language was included within the definition of “baseline concentration” so as to be consistent with applicable precedence discussed on pages 34 through 37 of the Illinois EPA’s Statement of Reasons. If this change is made by the Board, the Illinois EPA would suggest that the Board replace the word “mean” with “means.”

- h. Replace “shall be” with “is”, “do” or “does” where appropriate – e.g. Section 204.380(a) before “prescribed”; Sections 204.850 and 204.860(a) before “not apply”;

The replacement of these terms in Part 204, with the possible exception of the change proposed to Section 204.860(a), as suggested by the Board would generally be inconsistent with Sections 40 CFR 52.21 and 51.166. For instance, Section 204.380(a) is modeled after 40 CFR 51.100(kk)(1) and employs the phrase “shall be prescribed.” While it is not entirely clear what language the Board is proposing to replace in Section 204.850, if the Board is questioning whether it would be appropriate to replace “204.1400 shall apply” with “204.1400 do apply,” the Illinois EPA would point out that this would be inconsistent with 40 CFR 52.21(r)(4) and 51.166(r)(2). The Illinois EPA relied upon these two provisions in its development of Section 204.850.

The possible exception would be Section 204.860(a). Section 204.860(a) is modeled after 40 CFR 52.21(i)(1) and 51.166(i)(1). In 40 CFR 52.21(i)(1), the regulation makes use of the term “shall.” However, in 40 CFR 51.166(i)(1), the regulation employs the term “do.” Given 40 CFR 51.166(i)(1) makes use of the term “do”, such a replacement could take place to Section 204.860(a).

- i. Replace “shall” with “will” where appropriate – e.g. Section 204.1860(b) before “continue to be effective”; Section 204.1870(a)(4) before “be effective”;

The replacement of the term “shall” with the term “will” in Part 204 would be inconsistent with the use of the term “shall” in 40 CFR 52.21 and 51.166. For instance, Section 204.1860(b) is modeled after 40 CFR

52.21(aa)(10)(ii) and 51.166(w)(10)(ii). Section 204.1870(a)(4) is modeled after 40 CFR 52.21(aa)(11)(d) and 51.166(w)(11)(d). In all instances, the applicable federal regulation employs the term "shall."

- j. Remove italics from text that is not taken directly from the Act – e.g. in Section 105.604(a) remove italics on "under Section 9.1(d) of the Act and 35 Ill. Adm. Code Part 204,"; in Section 105.604(b) remove italics from "by the Board" at the end of the sentence; in Section 105.604(c) remove italics from "for a PSD permit" after "comment process" and from "that was made available during the Agency public comment process" at the end of the sentence;

This change is acceptable to the Illinois EPA.

- k. In Section 105.604(c) add "a" after "the person may still petition for" and add "proposed" after "reflect changes from the";

This change is acceptable to the Illinois EPA.

- 47. Would the following proposed revisions be acceptable?

- a. In Section 105.606(a):

Except as provided in subsection (b), if a person who may petition the Board under Section 105.604 ~~of this Subpart wishes to appeal for review of the Agency's final decision to the Board under this Subpart, the person~~ must file the petition with the Clerk within 35 days after the date of the Agency's final permit action.

The proposed revisions to Section 105.606(a) is acceptable to the Illinois EPA.

- b. In Section 105.606(b):

A ~~If the~~ permit applicant who wishes to appeal the Agency's failure to act on an application for a PSD permit within the time frame specified in Section 39(f)(3) of the Act, ~~the person~~ must file a petition for review with the Clerk before the Agency denies or issues the final permit.

The proposed revisions to Section 105.606(b) is acceptable to the Illinois EPA.

- c. In Section 204.120 Severability

If any provision of this Part, or the application of such provision to any person or circumstance, is held invalid, it will not affect the remainder of this Part, or the application of such provision to persons or circumstances other than those

as to which it is held invalid, ~~shall is not be affected thereby.~~

The language of Section 204.120 is modeled after 40 CFR 52.21(bb) and 51.166(x). The language proposed by the Illinois EPA in Section 204.120 more closely mirrors the applicable federal regulations rather than the above language proposed by the Board.

d. In Section 204.200 Definitions

~~Unless otherwise specified in this Part, the definitions of the terms used in this Part shall be the same as those the terms used in the Board Rules and Regulations at 35 Ill. Adm. Code Part 211.~~

The proposed revisions to Section 204.200 is acceptable to the Illinois EPA.

48. Ms. Driver asked the Agency, "Going back to Section 204.1300, this is on the Notification of Application Completeness, our question is, is it the Illinois' [sic] EPA intent to issue this notification in writing?" 11/27/18 TR at 138-139.

Yes, a written notification addressing application completeness will be provided to the applicant.

49. Ms. Driver asked the Agency, "And then following up on that, what is the impact of the Agency not issuing that notice within 30 days?" 11/27/18 TR at 139.

If the Agency does not provide a notification of completeness or incompleteness for a PSD application within 30 days, as provided for by Section 204.1300, the impact or implications, if any, will depend on the particular circumstances. Clearly, the absence of such notification would have no impact if the submitted PSD application is patently incomplete. The experience of the Illinois EPA is that PSD applications are commonly submitted in pieces. This is because the first step in preparing a PSD application is to address applicability of PSD, identifying the pollutants and emissions units for which the application must include a BACT demonstration. The next step is to conduct the BACT analyses and prepare the BACT demonstrations for those subject emission units and pollutants, focusing first on the principle emission units and modes of operation that will be critical for the air quality impact analyses. Then, the air quality impact analyses are prepared that address the impacts of the emissions of the project when controlled to the levels that are proposed as BACT. The analyses for other impacts of a proposed project are then developed based on the air quality impacts of the proposed project. It should be understood that, as a practical matter, it is not possible for a permitting authority to determine that an application is fully complete so as to support issuance of a PSD permit until the technical review of the application is complete. Until this point has been reached, an applicant should anticipate requests for additional information from the Agency that, if not adequately answered, could prevent issuance of the requested permit.

Even after an applicant for a PSD permit is notified that the Agency has found the application to be complete, the applicant should anticipate requests for additional information from the Agency to enable the processing of the application to continue towards the preparation of a draft permit for a public comment period. The absence of timely notification of completeness would only become an issue if: (i) the Agency fails to take timely action on the application within one year, as provided for by Section 204.1330, (ii) the applicant elects to file a petition for review pursuant to Section 105.606, and (iii) the applicant argues in its appeal that the start of the one year period should be considered to be the date that the Agency should have notified it that the application was complete in accordance with Section 204.1300.

ADDITIONAL ITEMS

The Board's August 23, 2018 Proposed Rule (Proposed Rule) that went to public comment contained two typographical errors that originated in the Illinois EPA's July 2, 2018, Regulatory Proposal. First, in Section 105.302(c), the formatting of subsections (1) through (4) was not correct; this mistakenly continued in the Board's Proposed Rule. The Illinois EPA proposes that the formatting in Section 105.302(c) be corrected. Second, Section 204.1910 includes a subsection (a) but did not include a subsection (b). The Illinois EPA proposes deleting the reference to subsection (a) in Section 204.1910.

In addition, the Board's Proposed Rule incorrectly included typographical errors that did not originate with the Illinois EPA. For ease of reference, the following typographical errors should be corrected:

Section 204.240 Baseline Actual Emissions – The Board's lettering of the subsections wrongly includes three subsections (a) and one subsection (b).

Section 204.250 Baseline Area – The use of subscripts for SO₂, NO₂, PM_{2.5} and PM₁₀ have been mistakenly replaced with SO2, NO2, PM2.5 and PM10.

Section 204.350 Dispersion Technique – The Board eliminated the reference to subsection (b)(2)(C) and replaced it with (b)(2)(D). Second, the Board's numbering of subsection (b) includes two subsections (1) and two subsections (2) that resulted in an erroneous reference to subsection (3). Finally, use of a subscript for SO₂ has been mistakenly replaced with SO2 in the errantly labelled subsection (b)(3).

Section 204.420 Good Engineering Practice – The Board's lettering of the subsections includes two subsections (a) and two subsections (b).

Section 204.430 Greenhouse Gases (GHGs) – The use of a subscript for CO_{2e} was mistakenly replaced with CO2e.

Section 204.490 Major Modification – The Board’s lettering of subsection (c) includes two subsections (1), two subsections (2), two subsections (3) and two subsections (4).

Section 204.500 Major Source Baseline Date – The use of subscripts for SO₂, NO₂, PM_{2.5} and PM₁₀ have been mistakenly replaced with SO2, NO2, PM2.5 and PM10.

Section 204.510 Major Stationary Source – The Board’s lettering includes two subsections (a) that resulted in one erroneously labelled subsection (b). In addition, in the Board’s wrongly labelled (b)(5), the word “Iron” has a space between the “I” and the “ron”.

Section 204.520 Minor Source Baseline Date - The use of subscripts for SO₂, NO₂, PM_{2.5} and PM₁₀ have been mistakenly replaced with SO2, NO2, PM2.5 and PM10.

Section 204.550 Net Emissions Increase – The heading for this section is underlined inconsistent with the heading for all other sections in this proposal.

Section 204.610 Regulated NSR Pollutant - The use of subscripts for SO₂, NO_x, and PM_{2.5} have been mistakenly replaced with SO2, NOx, and PM2.5.

Section 204.860 Exemptions – The Board’s numbering in subsection (a) includes two subsections (1).

Section 204.1200 Additional Requirements for Sources Impacting Federal Class I Areas – In subsections (e), (f) and (h) the use of subscripts for SO₂, NO_x, PM_{2.5} and PM₁₀ have been mistakenly replaced with SO2, NOx, PM2.5 and PM10.

Section 204.1500 Innovative Control Technology – In subsection (b), the Board’s numbering includes two subsections (1) and (2).

Section 204.1800 General Requirements for Establishing PAL – In subsection (a)(1) the use of a subscript for CO_{2e} was incorrectly replaced with CO2e.

Section 204.1820 Setting the 10-Year Actuals PAL Level – In subsection (a) the use of a subscript for CO_{2e} and NO_x was incorrectly replaced with CO2e and NOx.

Section 204.1830 Contents of the PAL Permit – In subsection (a)(1), the use of a subscript for CO_{2e} was incorrectly replaced with CO2e.

Section 204.1880 Monitoring Requirements – In subsection (a)(1), the use of a subscript for CO_{2e} was incorrectly replaced with CO2e.

Section 204.1900 Reporting and Notification Requirements – In subsection (a)(2), the use of a subscript for CO₂e was incorrectly replaced with CO₂e.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: Sally Carter
Sally Carter
Assistant Counsel
Division of Legal Counsel

Dated: January 24, 2019

1021 N. Grand Ave. East
P.O. Box 19276
Springfield, IL 62794-9276
(217) 782-5544

EXHIBIT

A

Carter, Sally

From: Ogulei, David <Ogulei.David@epa.gov>
Sent: Monday, July 9, 2018 11:38 AM
To: Carter, Sally
Cc: Damico, Genevieve; Barton, Kasey
Subject: [External] RE: State of Illinois PSD rulemaking

Awesome!! Thanks for letting us know.

From: Carter, Sally [mailto:Sally.Carter@Illinois.gov]
Sent: Thursday, July 05, 2018 1:24 PM
To: Ogulei, David <Ogulei.David@epa.gov>; Damico, Genevieve <damico.genevieve@epa.gov>
Subject: State of Illinois PSD rulemaking

Genevieve and David,

The Illinois EPA filed its proposed rulemaking for a state Prevention of Significant Deterioration program with the Illinois Pollution Control Board this week. Please find the link to the pending rulemaking below.

<https://pcb.illinois.gov/Cases/GetCaseDetailsById?caseId=15596>

If you have any questions, please do not hesitate to call.

Sally Carter
Assistant Counsel

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Carter, Sally

From: Bloomberg, David E.
Sent: Wednesday, May 16, 2018 8:33 AM
To: Aburano, Douglas (aburano.douglas@epa.gov); Leslie, Michael (leslie.michael@epa.gov)
Cc: Vetterhoffer, Dana; Carter, Sally
Subject: Clarification Regarding Incorporation by Reference
Attachments: Cathy Stepp Ltr 5-16-18 re Clarification Regarding Incorporation by Reference.pdf

Doug,

Today we are putting in the mail a clarification letter regarding Incorporation by Reference in our rules. Attached is a scanned copy of that letter.

- David

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**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217)782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, DIRECTOR

217/524-4949

May 16, 2018

Cathy Stepp
Regional Administrator
U.S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604-3507

Re: Clarification Regarding Incorporations by Reference

Dear Ms. Stepp:

In a submittal dated May 2, 2017, the Illinois Environmental Protection Agency (Illinois EPA or Agency) requested that the United States Environmental Protection Agency (USEPA) approve as a State Implementation Plan (SIP) revision provisions to establish a framework for permits-by-rule (PBR), and specifically provide for a PBR for small boilers. As part of the submission, the Illinois EPA included amendments to 35 Ill. Adm. Code 201.104, titled "Incorporations by Reference." Section 201.104 incorporates by reference federal regulations for the prevention of significant deterioration of air quality (PSD) at 40 CFR 52.21 (2015), and certain Subparts of the Standards of Performance for New Stationary Sources at 40 CFR Part 60 (2015) and the National Emission Standards for Hazardous Air Pollutants at 40 CFR Part 63 (2015).

As required by the Illinois Administrative Procedures Act, Section 201.104 states that these incorporations by reference do not include any later amendments or editions. Despite that Illinois EPA has historically used incorporations by reference in this manner, USEPA expressed new concern that this language could be interpreted to mean that Illinois EPA had substantively adopted these federal regulations as a matter of State law for inclusion in the SIP, and that they were being submitted for USEPA analysis and action under Section 110 of the Clean Air Act. USEPA also indicated that referencing the regulations as of a specific date may create compliance and enforcement concerns if USEPA subsequently revises those regulations, because any revisions made after 2015 would not be reflected in the regulations cited in Section 201.104.

To address these concerns, the Illinois EPA provides below a clarification of the Agency's intent in using the term "incorporation by reference." This same clarification applies not only to the PBR rulemaking, but also to all future SIP submittals that contain incorporations by reference.

As indicated above and as explained in conversations with USEPA, the Agency is required by State law to specify a "date certain" for all provisions that are incorporated by reference. *See* 5 ILCS 100/5-75(a). Doing so provides impacted entities with regulatory certainty and also ensures that later changes to

Rockford • 4302 N. Main St., Rockford, IL 61103 • (815) 987-7760

Elgin • 595 S. State, Elgin, IL 60123 • (847) 608-3131

Bureau Of Land - Peoria • 7620 N. University St., Peoria, IL 61614 • (309) 693-5464

Collinsville • 2009 Mall Street, Collinsville, IL 62234 • (618) 346-5120

Chicago • 100 W. Randolph Street Suite 4-500, Chicago, IL 60601

Des Plaines • 9511 Harrison St., Des Plaines, IL 60016 • (847) 294-4000

Peoria • 412 SW Washington St, Suite D., Peoria, IL 61602 • (309) 671-3022

Champaign • 2125 S. First St., Champaign, IL 61820 • (217) 278-5800

Marion • 2309 W. Main St., Suite 116, Marion, IL 62959 • (618) 993-7200

incorporated materials will not automatically “pass through” to the regulated community via State rules (although changes to materials like federal regulations may, of course, automatically apply to the regulated community via *federal* rules). The State must first have an opportunity to assess the changes and determine if a rule revision is needed. The State must also comply with applicable procedural requirements, such as public notice and hearing, before making revisions.¹ Should changes to incorporated materials necessitate changes to State rules, the Agency would initiate a rulemaking and, in fact, the Illinois Environmental Protection Act sets forth a rulemaking process specifically for updating incorporations. *See* 415 ILCS 5/28.6.²

The Illinois EPA’s sole intention in using incorporations is to reference external materials, such as federal rules, guidance, and professional standards. Incorporations by reference are not intended to, and from a legal standpoint cannot, alter the applicability of federal regulations. Illinois has included incorporations by reference in the overwhelming majority of substantive regulations adopted and submitted to USEPA as SIP revisions in the last several decades, and USEPA has, to date, approved them. To the Illinois EPA’s knowledge, incorporation by reference provisions have never hindered environmental regulation in the State of Illinois, either at the federal or State level.

The Illinois EPA intends to continue to update its rules as necessary to comply with applicable federal and State laws should USEPA revise incorporated materials. Furthermore, the Illinois EPA will continue to implement the most recent version of the federal PSD program (40 CFR 52.21) and current USEPA guidance consistent with its most recent PSD delegation agreement with USEPA, unless and until USEPA approves a State PSD program.

If further information is required or should you have any questions, please contact David Bloomberg, Air Quality Planning Section Manager, at 217-524-4949 or david.bloomberg@illinois.gov.

Cordially,



Alec Messina
Director

¹ In fact, the same principles govern federal agencies when incorporating material by reference. 1 CFR Part 51. Under Section 51.1, an incorporation by reference must meet the requirements of the federal Administrative Procedure Act, and requires a formal notice and comment rulemaking. The only way a federal agency may change or remove an approved incorporation is to publish a notice in the Federal Register and amend the Code of Federal Regulations. *See* 1 CFR 51.11. Incorporated materials are limited to the edition of the publication approved in the incorporation by reference. The federal regulations do not provide for self-updating references or the incorporation of material that is not yet in existence.

Consistent with the above regulations, guidance issued in 2002 and made available on USEPA’s website instructed states that wished to incorporate federal regulations under the Resource Conservation and Recovery Act to specify a date certain, indicating that “it is very important to specify the date of the [CFR] adopted. Otherwise, it may not be clear which version of the [CFR] the State is adopting, which can lead to confusion or legal challenges.” USEPA also warned that various state courts have held that state regulations adopting prospective federal regulations are an unconstitutional delegation of legislative authority. *See* <https://www.epa.gov/sites/production/files/2016-03/documents/ibr1202.pdf>. While the nature of the incorporation by reference is different in this situation, these same concepts apply to Illinois’ need for dates certain when referencing federal materials, whether Illinois uses the incorporation by reference mechanism or not.

² In updating its regulations, the Agency intends to comply with any applicable federal provisions. For example, 40 CFR 51.166(a)(6) indicates that states have three years in which to update state PSD programs in response to changes made to federal requirements.

Carter, Sally

From: Carter, Sally
Sent: Wednesday, March 14, 2018 1:26 PM
To: Barton, Kasey
Subject: RE: Illinois Incorporation by Reference Issues

yes

From: Barton, Kasey [mailto:Barton.Kasey@epa.gov]
Sent: Wednesday, March 14, 2018 1:25 PM
To: Carter, Sally <Sally.Carter@Illinois.gov>
Subject: [External] RE: Illinois Incorporation by Reference Issues

Thanks. Could I give you a call at 2:30?

From: Carter, Sally [mailto:Sally.Carter@Illinois.gov]
Sent: Wednesday, March 14, 2018 1:17 PM
To: Barton, Kasey <Barton.Kasey@epa.gov>
Subject: RE: Illinois Incorporation by Reference Issues

I am generally available this afternoon but will be in and out of my office. Is there a time that works this afternoon for you? My direct line is 217-782-5581

From: Barton, Kasey [mailto:Barton.Kasey@epa.gov]
Sent: Wednesday, March 14, 2018 11:14 AM
To: Carter, Sally <Sally.Carter@Illinois.gov>
Subject: [External] RE: Illinois Incorporation by Reference Issues

Hi Sally:

I received a call from David Ogulei today about this matter, and I'd like follow-up with you about it if possible. Do you have time today or tomorrow for a quick call?

Thanks – I appreciate it.
Kasey

From: Barton, Kasey
Sent: Monday, February 26, 2018 4:17 PM
To: 'Sally.Carter@Illinois.gov' <Sally.Carter@Illinois.gov>
Cc: Louise Gross <Gross.Louise@epa.gov>; Danny Marcus <Marcus.Danny@epa.gov>; David Ogulei <Ogulei.David@epa.gov>
Subject: RE: Illinois Incorporation by Reference Issues

Hi Sally:

Thank you for speaking with us on February 21; we thought it was a productive call. We are following up to propose a path forward to address our concerns about the way in which IEPA uses the term "incorporation by reference" in its

proposed permit by rule (PBR) and prevention of significant deterioration (PSD) regulations. We also want to clarify our understanding of the state's intent in including specific dates for certain referenced rules.

More specifically, IEPA proposes to amend 35 IAC § 201.104 of the PBR rules to specify that the following are "incorporated by reference": the federal PSD regulations at 40 C.F.R. § 52.21 (2015); and certain Subparts of the Standards of Performance for New Stationary Sources at 40 C.F.R. Part 60 and the National Emission Standards for Hazardous Air Pollutants for Source Categories at 40 C.F.R. Part 63. Additionally, 35 IAC § 204.100 of the proposed PSD regulations would list 40 C.F.R. Parts 50 through 99 as "incorporated by reference." Both of these sections state that these incorporations by reference do not include any later amendments or editions.

As discussed, our concern is that the phrase "incorporated by reference" could be interpreted to mean that IEPA had substantively adopted these federal regulations as a matter of state law for inclusion in the SIP, and that they were being submitted for EPA analysis and action under Section 110 of the Clean Air Act. During our call, you stated that this had not been IEPA's intention, nor had it used that term to enable state implementation or enforcement of these federal rules. Rather, IEPA's intention was solely to reference the federal rules that are identified in the state PBR and PSD regulations.

Additionally, 35 IAC §§ 201.104 and 204.100 refer to rules as of a certain date and state that the referenced rules would not include any later amendments or editions. Our concern is that the inclusion of a specified date would create a "SIP gap" if EPA subsequently revises the rules, because those revisions would not be reflected in the rules referenced in Sections 201.104 and 204.100. During the call, IEPA stated that it intends to update its rules consistent with applicable federal and state laws should EPA revise the referenced regulations.

In order for us to move forward with the approval process for the PBR regulations, we request that the Director of IEPA submit a letter clarifying the state's intent when using the term "incorporation by reference" in Section 201.104 and when including references to specific dates, as discussed above. Because Section 201.104(c) refers to the 2015 version of 40 C.F.R. § 52.21, we request that the clarification letter also address how referencing this version is consistent with our PSD Delegation Agreement, which requires IEPA to implement the current version of 40 C.F.R. § 52.21 and associated EPA guidance (see Section 201.510(a)(7)(C)).

In addition, we request that IEPA include a similar clarification when submitting its proposed PSD regulations for approval. For the PSD submittal, this clarification should also address whether referencing rules as of a specific date under Section 204.100 would cause the definitions in 35 IAC §§ 204.700, 204.230, 204.280, and 204.400 to deviate from the corresponding federal definitions in 40 C.F.R. § 51.166(b)(48), (16), (12) and (17), respectively. If so, IEPA would need to demonstrate that the state definitions are more stringent, or at least as stringent in all respects as the federal definitions, as required by 40 C.F.R. § 51.166(b).

Please note that this summary is based on our understanding of recent discussions. We are available to further discuss the specific contents of the clarification letters described above, including the type of information that IEPA may consider for the demonstration required by 40 C.F.R. § 51.166(b), or any other questions or concerns.

Thank you,

Kasey Barton
Associate Regional Counsel
US EPA Region 5
77 W Jackson Blvd
Chicago, Illinois 60604
Ph: 312-886-7163

From: Barton, Kasey
Sent: Friday, February 23, 2018 3:30 PM
To: 'Sally.Carter@Illinois.gov' <Sally.Carter@Illinois.gov>
Cc: Louise Gross <Gross.Louise@epa.gov>; Danny Marcus <Marcus.Danny@epa.gov>; David Ogulei <Ogulei.David@epa.gov>
Subject: Illinois Incorporation by Reference Issues

Hi Sally:

Thank you for speaking with us earlier this week, it was very helpful. We are still having some internal discussions, but plan to follow-up with you on Monday regarding a proposed path forward for the incorporation by reference issues.

Please let me know if you have any questions. Have a good weekend.

Kasey Barton
Associate Regional Counsel
US EPA Region 5
77 W Jackson Blvd
Chicago, Illinois 60604
Ph: 312-886-7163

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Carter, Sally

From: Aburano, Douglas <aburano.douglas@epa.gov>
Sent: Thursday, March 1, 2018 2:50 PM
To: Bloomberg, David E.
Subject: [External] FW: Illinois Incorporation by Reference Issues

From: Barton, Kasey
Sent: Monday, February 26, 2018 4:17 PM
To: Sally.Carter@Illinois.gov
Cc: Gross, Louise C <gross.louise@epa.gov>; Marcus, Danny <marcus.danny@epa.gov>; Ogulei, David <Ogulei.David@epa.gov>
Subject: RE: Illinois Incorporation by Reference Issues
Hi Sally:

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Additionally, 35 IAC §§ 201.104 and 204.100 refer to rules as of a certain date and state that the referenced rules would not include any later amendments or editions. Our concern is that the inclusion of a specified date would create a "SIP gap" if EPA subsequently revises the rules, because those revisions would not be reflected in the rules referenced in Sections 201.104 and 204.100. During the call, IEPA stated that it intends to update its rules consistent with applicable federal and state laws should EPA revise the referenced regulations.

In order for us to move forward with the approval process for the PBR regulations, we request that the Director of IEPA submit a letter clarifying the state's intent when using the term "incorporation by reference" in Section 201.104 and when including references to specific dates, as discussed above. Because Section 201.104(c) refers to the 2015 version of 40 C.F.R. § 52.21, we request that the clarification letter also address how referencing this version is consistent with our PSD Delegation Agreement, which requires IEPA to implement the current version of 40 C.F.R. § 52.21 and associated EPA guidance (see Section 201.510(a)(7)(C)).

In addition, we request that IEPA include a similar clarification when submitting its proposed PSD regulations for approval. For the PSD submittal, this clarification should also address whether referencing rules as of a specific date under Section 204.100 would cause the definitions in 35 IAC §§ 204.700, 204.230, 204.280, and 204.400 to deviate from the corresponding federal definitions in 40 C.F.R. § 51.166(b)(48), (16), (12) and (17), respectively. If so, IEPA would need to demonstrate that the state definitions are more stringent, or at least as stringent in all respects as the federal definitions, as required by 40 C.F.R. § 51.166(b).

Please note that this summary is based on our understanding of recent discussions. We are available to further discuss the specific contents of the clarification letters described above, including the type of information that IEPA may consider for the demonstration required by 40 C.F.R. § 51.166(b), or any other questions or concerns.

Thank you,

Kasey Barton

Associate Regional Counsel

US EPA Region 5

77 W Jackson Blvd

Chicago, Illinois 60604

Ph: 312-886-7163

From: Barton, Kasey

Sent: Friday, February 23, 2018 3:30 PM

To: 'Sally.Carter@Illinois.gov' <Sally.Carter@Illinois.gov>

Cc: Louise Gross <Gross.Louise@epa.gov>; Danny Marcus <Marcus.Danny@epa.gov>; David Ogulei <Ogulei.David@epa.gov>

Subject: Illinois Incorporation by Reference Issues

Hi Sally:

Thank you for speaking with us earlier this week, it was very helpful. We are still having some internal discussions, but plan to follow-up with you on Monday regarding a proposed path forward for the incorporation by reference issues. Please let me know if you have any questions. Have a good weekend.

Kasey Barton

Associate Regional Counsel

US EPA Region 5

77 W Jackson Blvd

Chicago, Illinois 60604

Ph: 312-886-7163

Carter, Sally

From: Carter, Sally
Sent: Wednesday, February 21, 2018 7:54 AM
To: Ogulei, David
Subject: RE: Call tomorrow?

Will talk to you later today. Thanks

-----Original Message-----

From: Ogulei, David [mailto:Ogulei.David@epa.gov]
Sent: Tuesday, February 20, 2018 4:20 PM
To: Carter, Sally <Sally.Carter@Illinois.gov>
Subject: [External] RE: Call tomorrow?

Yes, 1 to 2 pm would work. Please use the following call-in information:

Phone number: +1 (202) 991-0477
Conference ID: 1727963

David

-----Original Message-----

From: Carter, Sally [mailto:Sally.Carter@Illinois.gov]
Sent: Tuesday, February 20, 2018 2:27 PM
To: Ogulei, David <Ogulei.David@epa.gov>
Subject: Re: Call tomorrow?

Thanks so much, David.

Assuming my daughter is well, could we do 1 to 2 tomorrow? I will also have Dana Vetterhoffer on the phone. Please let me know what number to call tomorrow.

Thanks.
Sally

From: Ogulei, David <Ogulei.David@epa.gov>
Sent: Tuesday, February 20, 2018 11:41:20 AM
To: Carter, Sally
Subject: [External] Call tomorrow?

Hi Sally,

Our attorneys are available for a call tomorrow, Wednesday @ 11:00-12:00 or 1:00 - 2:00. What time works for you? We will also use this time to communicate our comments on the draft PSD rules.

I hope your child feels better.

David Ogulei
U.S. Environmental Protection Agency

Region 5 | Air & Radiation Division | AR-18J

77 West Jackson Blvd. | Chicago, Illinois 60604

Phone: (312) 353-0987 | Ogulei.David@epa.gov<mailto:Ogulei.David@epa.gov>

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Carter, Sally

From: Carter, Sally
Sent: Thursday, February 15, 2018 10:48 AM
To: Ogulei, David
Subject: Third Document
Attachments: Scanned from a Xerox Multifunction Printer.pdf

Final document requested.



Federal Register

**Wednesday,
October 20, 2010**

Part III

Environmental Protection Agency

40 CFR Parts 51 and 52

**Prevention of Significant Deterioration
(PSD) for Particulate Matter Less Than 2.5
Micrometers (PM_{2.5})—Increments,
Significant Impact Levels (SILs) and
Significant Monitoring Concentration
(SMC); Final Rule**

**ENVIRONMENTAL PROTECTION
AGENCY****40 CFR Parts 51 and 52****[EPA-HQ-OAR-2006-0605; FRL-9210-9]****RIN 2060-AO24****Prevention of Significant Deterioration
(PSD) for Particulate Matter Less Than
2.5 Micrometers (PM_{2.5})—Increments,
Significant Impact Levels (SILs) and
Significant Monitoring Concentration
(SMC)****AGENCY:** Environmental Protection
Agency (EPA).**ACTION:** Final rule.

SUMMARY: The EPA is amending the requirements for particulate matter less than 2.5 micrometers (PM_{2.5}) under the Prevention of Significant Deterioration (PSD) program by adding maximum allowable increases in ambient pollutant concentrations ("increments") and two screening tools, known as the Significant Impact Levels (SILs) and a Significant Monitoring Concentration (SMC) for PM_{2.5}. The SILs for PM_{2.5} are also being added to two other New Source Review (NSR) rules that regulate the construction and modification of any major stationary source locating in an attainment or unclassifiable area, where the source's emissions may cause or contribute to a violation of the national ambient air quality standards (NAAQS).

DATES: This final rule is effective on December 20, 2010.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-HQ-OAR-2006-0605. All documents in the docket are listed on the <http://www.regulations.gov> Web Site. Although listed in the index, some information may not be publicly available, e.g., Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the Internet and will be publicly available only in hard copy form. Publicly available docket materials are available either electronically through <http://www.regulations.gov> or in hard copy at the Air Docket, EPA/DC, EPA West, Room 3334, 1301 Constitution Avenue, Northwest, Washington, DC. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

FOR FURTHER INFORMATION CONTACT: Mr. Dan deRoeck, Air Quality Policy Division, Office of Air Quality Planning and Standards (C504-03), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711, telephone number: (919) 541-5593, facsimile number: (919) 541-5509, e-mail address: deroeck.dan@epa.gov.

SUPPLEMENTARY INFORMATION: The information in this Supplementary Information section of this preamble is organized as follows:

- I. General Information
 - A. Does this action apply to me?
 - B. Where can I get a copy of this document and other related information?
- II. Purpose
- III. Overview of Final PM_{2.5} PSD Regulations
 - A. Increments
 - B. Significant Impact Levels
 - C. Significant Monitoring Concentration
- IV. Background
 - A. PSD Program
 - B. History of Particulate Matter (PM) NAAQS
 1. Total Suspended Particulate (TSP) and PM₁₀ NAAQS
 2. PM₁₀ NAAQS
 3. Revised PM₁₀ and PM_{2.5} NAAQS
 - C. Implementation of NSR for PM_{2.5}
 - D. Increments Under the PSD Program
 - E. Historical Approaches for Developing Increments
 1. Congressional Enactment of Increments for PM and SO₂
 2. EPA's Promulgation of Increments for NO_x and PM₁₀
 - a. Increments for NO_x Using the "Contingent Safe Harbor" Approach Under Section 166(a) of the Act
 - b. Increments for PM₁₀ Using "Equivalent Substitution" Approach Under Section 166(f) of the Act
- V. Final Action on PM_{2.5} Increments
 - A. Decision To Establish PM_{2.5} Increments Using "Contingent Safe Harbor" Approach Under Section 166(a)
 - B. Rationale for the Applicability of Section 166(a)
 - C. EPA's Interpretation of the Requirements Under Sections 166(a)-(d) of the Act
 1. Regulations as a Whole Should Fulfill Statutory Requirements
 2. Contingent Safe Harbor Approach
 3. The Statutory Factors Applicable Under Section 166(c)
 4. Balancing the Factors Applicable Under Section 166(e)
 5. Authority for States To Adopt Alternatives to Increments
 - D. Framework for Pollutant-Specific PSD Regulations for PM_{2.5}
 1. Increment System
 2. Area Classifications
 3. Permitting Procedures
 4. AQRV Review by Federal Land Manager (FLM) and Reviewing Authority
 5. Additional Impacts Analysis
 6. Installation of BACT
 - E. Final PM_{2.5} Increments
 1. Identification of Safe Harbor Increments
 2. Data Used by EPA for the Evaluation of the Safe Harbor Increments for PM_{2.5}

- J. Scope of Effects Considered
4. Evaluation of the Health and Welfare Effects of PM_{2.5}
 - a. Health Effects
 - b. Welfare Effects
5. Fundamental Elements of Increments
6. Evaluation of the Safe Harbor Increments
7. Compliance Determinations for the PM_{2.5} Increments
 - a. Modeling Compliance With PM_{2.5} Increments
 - b. Condensable PM
 - c. PM_{2.5} Precursors
- F. Final Action on Trigger and Baseline Dates for PM_{2.5} Increments
- G. Definition of "Baseline Area" for PM_{2.5}
- H. No Final Action With Respect to the Proposed Revocation of PM₁₀ Annual Increments
- I. Other Comments on Increments
- VI. Final Action on PM_{2.5} SILs
 - A. EPA's Determination on SILs for PM_{2.5}
 - B. Response to Comments Concerning the SILs
 1. Legal Basis for SILs
 2. Levels of the SILs
 - a. Class I SILs
 - b. Class II and III SILs
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I. General Information**A. Does this action apply to me?**

Entities affected by this rule include sources in all industry groups. The

majority of sources potentially affected are expected to be in the following groups:

Industry group	NAICS*
Electric services	221111, 221112, 221113, 221119, 221121, 221122
Petroleum refining	32411
Industrial inorganic chemicals	325181, 32512, 325131, 325182, 211112, 325998, 331311, 325188
Industrial organic chemicals	32511, 325132, 325192, 325188, 325193, 32512, 325199
Miscellaneous chemical products	32552, 32592, 32591, 325182, 32551
Natural gas liquids	211112
Natural gas transport	48621, 22121
Pulp and paper mills	32211, 322121, 322122, 32213
Paper mills	322121, 322122
Automobile manufacturing	336111, 336112, 336712, 336211, 336992, 336322, 336312, 33633, 33634, 33635, 336399, 336212, 336213
Pharmaceuticals	325411, 325412, 325413, 325414

* North American Industry Classification System.

Entities affected by this rule also include State and local permitting authorities, and tribal authorities that implement these regulations.

B. Where can I get a copy of this document and other related information?

In addition to being available in the docket, an electronic copy of this final rule will also be available on the World Wide Web. Following signature by the EPA Administrator, a copy of this final rule will be posted in the regulations and standards section of our NSR home page located at <http://www.epa.gov/nsr>.

II. Purpose

The purpose of this rulemaking is to finalize certain program provisions under the regulations to prevent significant deterioration of air quality due to emissions of PM_{2.5} (i.e., under the PM_{2.5} PSD regulations). This final rule supplements the final implementation rule for PM_{2.5}, known as the Clean Air Fine Particle Implementation Rule (CAFPPIR) that we promulgated on April 25, 2007 (72 FR 20586), and the PM_{2.5} NSR Implementation Rule that we promulgated on May 16, 2008 (73 FR 28321). Together, these three rules encompass the elements necessary for implementation of a PM_{2.5} program in any area. This final rule is important because it establishes increments, SILs,

and an SMC for PM_{2.5} to facilitate ambient air quality monitoring and modeling under the PSD regulations for areas designated attainment or unclassifiable for PM_{2.5}.

III. Overview of Final PM_{2.5} PSD Regulations**A. Increments**

This rulemaking establishes increments for PM_{2.5} pursuant to the legal authority contained in section 166(a) of the Clean Air Act (CAA or Act) for pollutants for which NAAQS are promulgated after 1977. The final PM_{2.5} increments were identified as Option 1 in the 2007 Notice of Proposed Rulemaking (NPRM) for this action, and are as follows:

Averaging period	NAAQS (µg/m ³)	Increments (µg/m ³)		
		Class I	Class II	Class III
Annual	15	1	4	8
24-hour	35	2	9	18

As discussed in more detail in sections V.F and VIII, the increments for PM_{2.5} will become applicable on October 20, 2011 in order to comply with section 166(b) of the Act (providing that regulations under section 166(a) "shall become effective one year after the date of promulgation").

This final rule does not revoke the annual increments for particulate matter less than 10 micrometers (PM₁₀) as proposed under Option 1 in the 2007 NPRM. Thus, we are retaining the 24-hour and annual PM₁₀ increments in addition to adding PM_{2.5} increments. This outcome is discussed in greater detail in section V.H of this preamble.

B. Significant Impact Levels

This rule establishes SILs for PM_{2.5} for evaluating the impact a proposed new source or modification may have on the NAAQS and PSD increments for PM_{2.5}. The SILs for PM_{2.5} were developed by scaling the existing PM₁₀ SILs using a PM_{2.5}-to-PM₁₀ NAAQS ratio. The final SILs were identified as Option 3 in the 2007 NPRM, and are as follows:

Averaging period	SILs ($\mu\text{g}/\text{m}^3$)		
	Class I	Class II	Class III
Annual	0.06	0.3	0.3
24-hour	0.07	1.2	1.2

These values will be added to the State implementation plan (SIP) provisions for PSD at 40 CFR 51.166 (as an optional screening tool) and the Federal PSD program at 40 CFR 52.21, as well as under the preconstruction review permit requirements at 40 CFR 51.165(b) and part 51, Appendix S. See a more detailed discussion of the SILs, as well as the relevant comments and our responses to them, in section VI of this preamble. The SILs for $\text{PM}_{2.5}$ are incorporated into the Federal PSD program as well as into the regulations for State-implemented PSD programs, although they are regarded as optional for State programs. The effective date for implementing the SILs under the Federal PSD program is the effective date of this final rule. See section VIII of this preamble for further discussion of the effective date.

C. Significant Monitoring Concentration

This final rule establishes the SMC for $\text{PM}_{2.5}$ as $4 \mu\text{g}/\text{m}^3$ $\text{PM}_{2.5}$ (24-hour average). This value has been developed pursuant to proposed Option 1; however, it should be noted that the value being established in this final rule is lower than the proposed value of $10 \mu\text{g}/\text{m}^3$ that was originally developed under Option 1. A more detailed discussion of the proposed SMC is presented in section VII of this preamble, describing the rationale for altering the proposed SMC, and the relevant comments on the proposed SMC and our responses to them. The SMC for $\text{PM}_{2.5}$ is incorporated into the Federal PSD program as well as into the regulations for State-implemented PSD programs, although they are regarded as optional for State programs. As with the SILs for $\text{PM}_{2.5}$, the effective date for implementing the SMC under the Federal PSD program is the effective date of this final rule. See section VIII of this preamble for further discussion of the effective date.

IV. Background

A. PSD Program

The NSR provisions of the Act are a combination of air quality planning and air pollution control technology program requirements for new and modified stationary sources of air pollution. In brief, section 109 of the Act requires us to promulgate primary

NAAQS to protect public health and secondary NAAQS to protect public welfare. Once we have set these standards, states must develop, adopt, and submit to us for approval SIPs that contain emission limitations and other control measures to attain and maintain the NAAQS and to meet the other requirements of section 110(a) of the Act. Part C of title I of the Act contains the requirements for a component of the major NSR program known as the PSD program. This program sets forth procedures for the preconstruction review and permitting of new and modified major stationary sources of air pollution locating in areas meeting the NAAQS ("attainment" areas) and areas for which there is insufficient information to classify an area as either attainment or nonattainment ("unclassifiable" areas). Most states have SIP-approved preconstruction permit (major NSR) programs. The Federal PSD program at 40 CFR 52.21 applies in some states that lack a SIP-approved permit program, and in Indian country.⁴ The applicability of the PSD program to a major stationary source must be determined in advance of construction and is a pollutant-specific determination. Once a major source is determined to be subject to the PSD program (PSD source), among other requirements, it must undertake a series of analyses to demonstrate that it will use the best available control technology (BACT) and will not cause or contribute to a violation of any NAAQS or increment. For the latter demonstration, the PSD regulations generally require sources to submit for review and approval a source impact analysis and an air quality analysis.

The source impact analysis is primarily a modeling analysis designed to show that the allowable emissions increase from the proposed project, in conjunction with other emissions increases from existing sources, will not result in a violation of either the NAAQS or increments. In cases where the source's emissions may adversely affect an area classified as a Class I area, additional review is conducted to protect the increments and special

attributes of such an area defined as "air quality related values" (AQRVs).

The air quality analysis must assess the ambient air quality in the area that the proposed project would affect. For this analysis, the owner or operator of the proposed project must submit as part of a complete permit application air quality monitoring data that represent the air quality in the area affected by the proposed source for the 1-year period preceding receipt of the application. Where data may already exist to represent existing air quality, it may be used by the applicant; otherwise, the source owner or operator is responsible for the installation and operation of monitors to collect the necessary data.

Historically, EPA has allowed the use of several types of screening tools to facilitate implementation of the preconstruction review process to reduce the permit applicant's burden and streamline the permitting process for *de minimis* circumstances. These tools include a significant emissions rate (SER), SILs, and a SMC. The SER, defined in tons per year (tpy) for each regulated pollutant, is used to determine whether the emissions increase from any proposed source or modification can be excluded from review on the grounds that the increase of any particular pollutant is *de minimis*. An emission increase for a particular pollutant that is greater than the SER defined in the NSR regulations for that pollutant is considered to be a significant increase.

The SIL, expressed as an ambient pollutant concentration (micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)), is used to determine whether the ambient impact of a particular pollutant (once it is determined to be emitted in significant amounts) is significant enough to warrant a complete source impact analysis involving modeling the collective impacts of the proposed project and emissions from other existing sources.

The PSD regulations generally require each PSD applicant to collect 1 year of continuous air quality monitoring data for any pollutant determined to be subject to preconstruction review as part of complete PSD permit application. Using the SMC as a screening tool, expressed as an ambient pollutant concentration ($\mu\text{g}/\text{m}^3$), sources may be able to demonstrate that the modeled air

⁴We have delegated our authority to some states to implement the Federal PSD program. The EPA remains the reviewing authority in non-delegated states for king SIP-approved programs and in Indian country.

quality impact of emissions from the new source or modification, or the existing air quality level in the area where the source would construct, is less than the SMC, *i.e., de minimis*, and may be allowed to forego the preconstruction monitoring requirement for a particular pollutant at the discretion of the reviewing authority.² See 40 CFR 51.166(i)(5) and 52.21(i)(5).

When the reviewing authority reaches a preliminary decision to authorize construction of a proposed major new source or major modification, it must provide notice of the preliminary decision and an opportunity for comment by the general public, industry, and other persons that may be affected by the emissions of the proposed major source or major modification. After considering these comments, the reviewing authority may issue a final determination on the construction permit in accordance with the PSD regulations.

B. History of Particulate Matter (PM) NAAQS

1. Total Suspended Particulate (TSP) and PM₁₀ NAAQS

The EPA initially established NAAQS for PM in 1971, measured by the TSP indicator. Based on the size of the particles collected by the "high-volume sampler," which at that time was the reference method for determining ambient concentrations, TSP included all PM up to a nominal size of 25 to 45 micrometers. We established both annual and 24-hour NAAQS for TSP.

On July 1, 1987, we revised the NAAQS for PM and changed the indicator from TSP to PM₁₀; the latter indicator includes particles with a mean aerodynamic diameter less than or equal to 10 micrometers. The PM₁₀ particles are the subset of inhalable particles small enough to penetrate to the thoracic region (including the tracheobronchial and alveolar regions) of the respiratory tract (referred to as thoracic particles). We established annual and 24-hour NAAQS for PM₁₀, and revoked the NAAQS for TSP. (52 FR 24634).

2. PM_{2.5} NAAQS

On July 18, 1997, we again revised the NAAQS for PM in several respects. While we determined that the NAAQS should continue to focus on particles less than or equal to 10 micrometers in diameter, we also determined that the

fine and coarse fractions of PM₁₀ should be considered separately. We established new annual and 24-hour NAAQS using PM_{2.5} (referring to particles with a nominal mean aerodynamic diameter less than or equal to 2.5 micrometers) as the indicator for fine particles. The 1997 NAAQS rule also modified the PM₁₀ NAAQS for the purpose of regulating the coarse fraction of PM₁₀ (referred to as thoracic coarse particles or coarse-fraction particles; generally including particles with a nominal mean aerodynamic diameter greater than 2.5 micrometers and less than or equal to 10 micrometers, or PM_{10-2.5}); however, this part of the rulemaking was vacated during subsequent litigation, leaving the pre-existing 1987 PM₁₀ NAAQS in place (62 FR 38652).

3. Revised PM_{2.5} and PM₁₀ NAAQS

On October 17, 2006, we promulgated revisions to the NAAQS for PM_{2.5} and PM₁₀ with an effective date of December 18, 2006 (71 FR 61144). We lowered the 24-hour NAAQS for PM_{2.5} from 65 µg/m³ to 35 µg/m³, and retained the existing annual PM_{2.5} NAAQS of 15 µg/m³. In addition, we retained the existing PM₁₀ 24-hour NAAQS of 150 µg/m³, and revoked the annual PM₁₀ NAAQS (set at 50 µg/m³).

C. Implementation of NSR for PM_{2.5}

After we established new annual and 24-hour NAAQS based on PM_{2.5} as the indicator for fine particles in July 1997, we issued a guidance document titled "Interim Implementation for the New Source Review Requirements for PM_{2.5}," John S. Seitz, Director, Office of Air Quality Planning and Standards, EPA, October 23, 1997. As noted in that guidance, section 165 of the Act implies that certain PSD requirements become effective for a new NAAQS upon the effective date of the NAAQS. Section 165(a)(1) of the Act provides that no new or modified major source may be constructed without a PSD permit that meets all of the section 165(a) requirements with respect to the regulated pollutant. Moreover, section 165(a)(3) provides that the emissions from any such source may not cause or contribute to a violation of any increment or NAAQS. Also, section 165(a)(4) requires BACT for each pollutant subject to PSD regulation. The 1997 guidance stated that sources would be allowed to use implementation of a PM₁₀ program as a surrogate for meeting PM_{2.5} NSR requirements until certain difficulties were resolved. These difficulties included the lack of necessary tools to calculate the emissions of PM_{2.5} and related

precursors, the lack of adequate modeling techniques to project ambient impacts, and the lack of PM_{2.5} monitoring sites.

On April 5, 2005, we issued a guidance document entitled "Implementation of New Source Review Requirements in PM-2.5 Nonattainment Areas," Stephen D. Page, Director, Office of Air Quality Planning and Standards, EPA. This memorandum provided guidance on the implementation of the nonattainment major NSR provisions in PM_{2.5} nonattainment areas in the interim period between the effective date of the PM_{2.5} NAAQS designations (April 5, 2005) and when we promulgate regulations to implement nonattainment major NSR for the PM_{2.5} NAAQS. In addition to affirming the continued use of the John S. Seitz guidance memo in PM_{2.5} attainment areas, this memo recommended that, until we promulgated the PM_{2.5} major NSR regulations, states should use a PM₁₀ nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM_{2.5} NAAQS.

On November 1, 2005, we proposed a rule to implement the PM_{2.5} NAAQS, including proposed revisions to the NSR program. For those states with EPA-approved PSD programs, we proposed to continue the 1997 NSR guidance to use PM₁₀ as a surrogate for PM_{2.5}, but only during the SIP development period. We also indicated in that proposal that we would be developing increments, SILs, and an SMC in a separate rulemaking, *i.e.*, this final rule. Since there was an interim surrogate NSR program in place, *i.e.*, the PM₁₀ Surrogate Policy, EPA decided to first promulgate the non-NSR part of the implementation rule (including attainment demonstrations, designations, control measures, etc.). This rule was promulgated as the CAFPRI on April 25, 2007 (72 FR 20586).

The NSR part of the implementation rule was issued separately as a final rule on May 16, 2008 (73 FR 28321), and included sets of NSR regulations for both attainment (PSD) and nonattainment areas (nonattainment NSR) for PM_{2.5}. In the May 16, 2008 rule we added one of the important screening tools—the SER—for PM_{2.5}. The SER for PM_{2.5} is defined as an emissions rate of 10 tpy for direct PM_{2.5} emissions. We also listed sulfur dioxide (SO₂) and nitrogen oxides (NO_x) as precursors of ambient PM_{2.5} and defined "significant" as 40 tpy or more of either precursor pollutant. States were allowed up to 3 years from the date of publication in the Federal Register to

² The basic monitoring exemption provision is part of the original monitoring requirements adopted in the 1980 PSD rulemaking, 45 FR 52676, 52710, August 7, 1980.

revise their SIPs and submit their revised NSR programs to EPA for approval.

D. Increments Under the PSD Program

Under section 165(a)(3) of the Act, a PSD permit applicant must demonstrate that emissions from the proposed construction and operation of a facility "will not cause, or contribute to, air pollution in excess of any (A) maximum allowable increase or maximum allowable concentration for any pollutant * * *." The "maximum allowable increase" of an air pollutant that is allowed to occur above the applicable baseline concentration for that pollutant is known as the PSD increment. By establishing the maximum allowable level of ambient pollutant concentration increase in a particular area, an increment defines "significant deterioration" of air quality in that area.

For PSD baseline purposes, a baseline area for a particular pollutant emitted from a source includes the attainment or unclassifiable area in which the source is located, as well as any other attainment or unclassifiable area in which the source's emissions of that pollutant are projected (by air quality modeling) to result in a significant ambient pollutant increase. See, e.g., 40 CFR 52.21(b)(15)(i). Once the baseline area is established, subsequent PSD sources locating in that area need to consider that a portion of the available increment may have already been consumed by previous emissions increases.

In general, the submittal date of the first complete PSD permit application in a particular area is the operative "baseline date."³ On or before the date of the first complete PSD application, emissions generally are considered to be part of the baseline concentration, except for certain emissions from major stationary sources, as explained in the following discussion of baseline dates. Most emissions increases that occur after the baseline date will be counted toward the amount of increment consumed. Similarly, emissions decreases after the baseline date restore or expand the amount of increment that is available.

In practice, three dates related to the PSD baseline concept are important in understanding how to calculate the amount of increment consumed—

(1) Trigger date; (2) major source baseline date; and (3) minor source baseline date. The first relevant date is the trigger date. The trigger date, as the name implies, triggers the overall increment consumption process nationwide. Specifically, this is a fixed date, which must occur before the minor source baseline date can be established for the pollutant-specific increment in a particular attainment area. See 40 CFR 51.166(b)(14)(ii) and 52.21(b)(14)(ii). For PM (regulated as TSP) and SO₂, Congress defined the applicable trigger date as August 7, 1977—the date of the 1977 amendments to the Act when the original statutory increments were established by Congress. For nitrogen dioxide (NO₂), we selected the trigger date as February 8, 1988—the date on which we proposed increments for NO₂. See 53 FR 40656, 40658; October 17, 1988. In this final rule, as described later, we are establishing a separate trigger date for purposes of implementing the PM_{2.5} increments. See section V.F of this preamble for additional discussion of the trigger date for PM_{2.5}.

The two remaining dates—"minor source baseline date" and "major source baseline date"—as described later, are necessary to properly account for the emissions that are to be counted toward the amount of increment consumed following the national trigger date, in accordance with the statutory definition of "baseline concentration" in section 169(4) of the Act. The statutory definition provides that the baseline concentration of a pollutant for a particular baseline area is generally the air quality at the time of the first application for a PSD permit in the area. Consequently, any increases in actual emissions occurring after that date (with some possible exceptions that we will discuss later) would be considered to consume the applicable PSD increment. However, the statutory definition in section 169(4) also provides that "[e]missions of sulfur oxides and particulate matter from any major emitting facility on which construction commenced after January 6, 1975, shall not be included in the baseline and shall be counted in pollutant concentrations established under this part."

To make this distinction between the date when emissions resulting from the construction at a major stationary source consume the increment and the date when emissions changes in general (i.e., from both major and minor sources) begin to consume the increment, we established the terms "major source baseline date" and "minor source baseline date," respectively. See 40 CFR

51.166(b)(14) and 52.21(b)(14). Accordingly, the "major source baseline date," which precedes the trigger date, is the date after which actual emissions increases associated with construction at any major stationary source consume the PSD increment. In accordance with the statutory definition of "baseline concentration," the PSD regulations define a fixed date to represent the major source baseline date for each pollutant for which an increment exists. Congress defined the major source baseline date for the statutory increments for PM and SO₂ as January 6, 1975. For the NO₂ increments, which we promulgated in 1988 under our authority to establish an increment system under section 166(a) of the Act, the major source baseline date we selected was February 8, 1988—the date on which we proposed increments for NO₂. 53 FR 40656. In both instances, the major source baseline date for the individual increments was set as a date which preceded the date on which the regulations pertaining to those increments were issued. In this final rule, as described later, we are establishing a separate major source baseline date for implementing the PM_{2.5} increments. See section V.F of this preamble for further discussion of the major source baseline date for PM_{2.5}.

The "minor source baseline date" is the earliest date after the trigger date on which a source or modification submits the first complete application for a PSD permit in a particular area. After the minor source baseline date, any increase in actual emissions (from both major and minor sources) consumes the PSD increment for that area.

Once the minor source baseline date is established, the new emissions increase from that major source consumes a portion of the increment in that area, as do any subsequent actual emissions increases that occur from any new or existing source in the area. When the maximum pollutant concentration increase defined by the increment has been reached, additional PSD permits cannot be issued until sufficient amounts of the increment are "freed up" via emissions reductions that may occur voluntarily (e.g., via source shutdowns) or by mandatory control requirements imposed by the reviewing authority. Moreover, the air quality in a region cannot deteriorate to a level in excess of the applicable NAAQS, even if all the increment in the area has not been consumed. Therefore, new or modified sources located in areas where the air pollutant concentrations are near the level allowed by the NAAQS may not have full use of the amount of

³ Baseline dates are pollutant specific. That is, a complete PSD application establishes the baseline date only for those regulated NSR pollutants that are projected to be emitted in significant amounts (as defined in the regulations) by the applicant's new source or modification. Thus, an area may have different baseline dates for different pollutants.

pollutant concentration increase allowed by the increment.

Under EPA guidance, the actual increment analysis that a proposed new or modified source undergoing PSD review must complete depends on the area impacted by the source's new emissions. We have provided approved air quality models and guidelines for sources to use to project the air quality impact of each pollutant (over each averaging period) for which an increment analysis must be done.⁴ In addition, we established SILs for each pollutant under the permit requirements applicable to new and modified major stationary sources locating in attainment areas that would cause or contribute to a violation of any NAAQS. See 40 CFR 51.165(b) and part 51, Appendix S, section III.A. These SILs have also been used for implementing the PSD program to identify levels below which the source's modeled impact of a particular pollutant is regarded as *de minimis*. In this final rule, we are establishing SILs (24-hour and annual) for PM_{2.5} that are being added to the aforementioned regulations containing SILs for other pollutants, as well as to the PSD regulations in 40 CFR 51.166 and 52.21. See further discussion of the SILs for PM_{2.5} in section VI of this preamble.

In the event that a source's modeled impacts of a particular pollutant are below the applicable SIL at all ambient air locations modeled, *i.e.*, *de minimis* everywhere, EPA's policy for PSD provides that no further modeling analysis is required for that pollutant. Our longstanding policy under the PSD program is that when a preliminary screening analysis based on the SIL is sufficient to demonstrate that the source's emissions throughout the area modeled will not cause or contribute to a violation of the increment, there is no need for a comprehensive source impact analysis involving a cumulative evaluation of the emissions from the proposed source and other sources affecting the area.

Within the impact area of a source subject to PSD, that is, the area within which the proposed project's emissions increase does have a significant impact, increment consumption is calculated using the source's proposed emissions increase, along with other actual emissions increases or decreases of the particular pollutant from any sources in the area, which have occurred since the minor source baseline date established for that area. In addition, the emissions increases or decreases from any major source that has commenced

construction since the major source baseline date (which precedes the minor source baseline date) will consume or expand increment. Thus, an emissions inventory of sources whose emissions, in whole or in part, of a particular pollutant consume or expand the available increment in the area must be compiled. The inventory of increment-consuming emissions includes not only sources located directly in the impact area, but sources outside the impact area that affect the air quality for the particular pollutant within the impact area.

The inventory of increment-consuming emissions includes emissions from increment-affecting sources at two separate time periods—the baseline date and the current period of time. For each source that was in existence on the relevant baseline date (major source or minor source), the inventory includes the source's actual emissions on the baseline date and its current actual emissions. The change in emissions over these time periods represents the emissions that consume increment (or, if emissions have gone down, expand the available increment). For sources constructed since the relevant baseline date, all their current actual emissions consume increment and are included in the inventory.

When the inventory of increment-consuming emissions has been compiled, computer modeling is used to determine the change in ambient concentration that will result from these emissions when combined with the proposed emissions increase from the new major source or major modification that is undergoing PSD review. The modeling has generally been guided by the "Guideline on Air Quality Models" (40 CFR part 51, Appendix W), which includes provisions on air quality models and the meteorological data input into these models. The model output (expressed as a change in concentration) for each relevant averaging period is then compared to the corresponding allowable PSD increment.

E. Historical Approaches for Developing Increments

1. Congressional Enactment of Increments for PM and SO₂

Congress established the first increments defining significant deterioration of air quality in the 1977 Amendments to the Act. These amendments, among other things, added part C to title I, setting out the requirements for PSD. In section 163, Congress included numerical

increments for PM and SO₂ for Class I, II, and III areas.

The three area classes are part of the increment system originally established by Congress. Congress designated Class I areas (including certain national parks and wilderness areas) as areas of special national concern, where the need to prevent deterioration of air quality is the greatest. Consequently, the allowable level of incremental change is the smallest relative to the other area classes, *i.e.*, most stringent, in Class I areas. The increments of Class II areas are larger than those of Class I areas and allow for a moderate degree of emissions growth. For future redesignation purposes, Congress defined a "Class III" classification to allow the redesignation of any existing Class II area for which a State may desire to promote a higher level of industrial development (and emissions growth). Thus, Class III areas are allowed to have the greatest amount of pollutant increase of the three area classes while still achieving the NAAQS. To date, there have been no redesignations made to establish a Class III area.

In establishing these PSD increments, Congress used the then-existing NAAQS for those pollutants as the benchmark for determining what constitutes "significant deterioration." Congress established the increments for PM as a percentage of the then-existing PM NAAQS. At the time the Act was amended in 1977, the NAAQS for PM were expressed in terms of ambient concentrations of TSP. Thus, EPA interpreted the statutory increments for PM using the same ambient TSP "indicator."

2. EPA's Promulgation of Increments for NO₂ and PM₁₀

Congress also provided authority for EPA to promulgate additional increments and to update the original PM increments created by statute. The EPA has promulgated two regulations pursuant to this authority.

a. Increments for NO₂ Using the "Contingent Safe Harbor" Approach Under Section 166(a) of the Act

Based on section 166(a) of the Act, on October 17, 1988, EPA promulgated increments for NO₂ to prevent significant deterioration of air quality due to emissions of NO_x (53 FR 40656). The EPA based these increments on percentages of the NAAQS in the same way that Congress derived the statutory increments for PM and SO₂. Those NO₂ increments were challenged in 1988 by the Environmental Defense Fund (EDF) when EDF filed suit in the U.S. Court of

⁴ See EPA's "Guideline on Air Quality Models" at 40 CFR part 51, Appendix W.

Appeals for the District of Columbia Circuit against the Administrator (*Environmental Defense Fund, Inc. v. Reilly*, No. 88-1882). The EDF successfully argued that we failed to sufficiently consider certain provisions in section 166 of the Act. The court remanded the case to EPA "to develop an interpretation of section 166 that considers both subsections (c) and (d), and if necessary to take new evidence and modify the regulations." See *Environmental Defense Fund v. EPA*, 898 F.2d 183, 190 (D.C. Cir. 1990) (*EDF v. EPA*). Section 166(c) of the Act requires the PSD regulations to, among other things, meet the goals and purposes set forth in sections 101 and 160 of the Act. Section 166(d) requires these regulations be at least as effective as the increments established for PM (in the form of TSP) and SO₂ in section 163 of the Act. The court considered the NO₂ increment values determined using the percentage-of-NAAQS approach as "safe harbor" increments which met the requirements of section 166(d) of the Act. However, the court also determined that EPA's reliance on such increment levels was contingent upon our completing the analyses required under section 166(c), which provided that the final increment values must address the goals of sections 101 and 160 of the Act to protect public health and welfare, parks, and AQRVs⁵ and to insure economic growth.

In response to the court's decision, we proposed rulemaking on increments for NO₂ on February 23, 2005 (70 FR 8880) and finalized the rule on October 12, 2005 (70 FR 59582). In the final rule, we established our policy on how to interpret and apply the requirements of sections 166(c) and (d) of the Act. In accordance with the court ruling, we conducted further analyses (considering the health and welfare effects of NO_x) and concluded that the existing NO₂ increments were adequate to fulfill the requirements of section 166(c). See 70 FR 59586 for our detailed analysis of how pollutant regulations satisfy the requirements of section 166 of the Act. Hence, we retained the existing NO₂

⁵ The term "air quality related values" is not defined in the Act, but the legislative history provides language saying that "The term 'air quality related values' of Federal lands designated as Class I includes the fundamental purposes for which such lands have been established and preserved by the Congress and the responsible Federal agency. For example, under the 1916 Organic Act to establish the National Park Service (16 U.S.C. 1), the purpose of such national park lands is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." S. Rep. No. 95-127 at 36 (1977).

increments along with other parts of the existing framework of pollutant-specific NO₂ increment regulations. We also amended the PSD regulations under 40 CFR 51.166 to make it clear that states may seek EPA approval of SIPs that utilize a different approach than EPA used to establish these NO₂ increments. To receive our approval of an alternative program, a State must demonstrate that its program satisfies the requirements of sections 166(c) and 166(d) of the Act and prevents significant deterioration of air quality from emissions of NO_x.

b. Increments for PM₁₀ Using "Equivalent Substitution" Approach Under Section 166(f) of the Act

On October 5, 1989, we proposed PM₁₀ increments. See 54 FR 41218. Although section 163 did not expressly define the existing statutory increments for PM in terms of a specific indicator, EPA reasoned that Congress' knowledge that TSP was the indicator for the PM NAAQS, and that the TSP standards were the starting point for the increments levels when the increments were established in 1977, meant that TSP was also the appropriate measure for the PM increments in section 163. As a consequence, EPA believed that the statutory PM increments could not simply be administratively redefined as PM₁₀ increments, retaining the same numerical values, following the revision of the PM NAAQS. Rather, we stated our belief that with the promulgation of the PM₁₀ NAAQS, EPA had both the responsibility and the authority under sections 166 and 301 of the Act to promulgate new increments for PM to be measured in terms of PM₁₀. We further concluded that promulgating PM₁₀ increments to replace, rather than supplement, the statutory TSP increments under section 163 represented the most sensible approach for preventing significant deterioration with respect to PM. See 54 FR 41220-41221.

We promulgated PM₁₀ increments to replace the then-existing TSP increments on June 3, 1993 (58 FR 31622). In the interim between proposal and promulgation, Congress enacted the 1990 CAA Amendments. As part of these amendments, Congress amended section 166 to add a new section 166(f). This section specifically authorized EPA to substitute PM₁₀ increments for the existing section 163 PM increments based on TSP, provided that the substituted increments are "of equal

⁶ Under the 2005 NO_x regulation, states can adopt measures other than increments as long as they can demonstrate that the measures selected comply with the same criteria and goals of sections 166(c) and (d) of the Act that must be met for increments

stringency in effect" as the section 163 increments.

Thus, we were able to replace the TSP increments under section 163 of the Act using PM₁₀ increments based directly on the newly enacted authority under section 166(f) of the Act. In the PM₁₀ rule, we maintained the existing baseline dates and baseline areas for PM that had been previously established using the TSP indicator. Also, as proposed, we promulgated PM₁₀ increments based on an approach we called the "equivalent to statutory increments" approach. Under this approach, we used the original TSP increments as a benchmark for calculating the PM₁₀ increments, thereby retaining roughly the same limitations on future deterioration of air quality as was allowed under the TSP increments.

In using this approach, we considered the historical consumption of TSP increment by a sample population of permitted PSD sources, and then determined the PM₁₀ increments for each area classification and averaging time that would provide approximately the same percentage of PM₁₀ increment consumption, on average, by the same population of sources. Then, all future calculations of increment consumption after the PM₁₀ implementation date would be based on PM₁₀ emissions. See 58 FR 31622 and 31625.

V. Final Action on PM_{2.5} Increments

In this section of the preamble, we will summarize the considerations that went into our proposed action and describe the final action being taken regarding new regulations for preventing significant deterioration of PM_{2.5} air quality—including PM_{2.5} increments (sections V.A through V.E, baseline dates and other permit requirements for PM_{2.5} (section V.F), baseline areas for PM_{2.5} (section V.G), and PM_{2.5} increments (section V.H).

A. Decision To Establish PM_{2.5} Increments Using "Contingent Safe Harbor Approach" Under Section 166(a)

The EPA's 2007 NPRM contained three options for developing numerical PM_{2.5} increments. Option 1 used the authority of section 166(a) of the Act to establish increments for PM_{2.5} as a new pollutant for which NAAQS were established after August 7, 1977, and established 24-hour and annual PM_{2.5} increments (Class I, II, and III) based on the "contingent safe harbor" approach. Options 2 and 3 used the contingent safe harbor approach under section 166(a) to only develop 24-hour PM_{2.5} increments (Class I, II, and III), while using the "equivalent substitution"

approach under section 166(f) of the Act to develop annual $PM_{2.5}$ increments. Each of these options is discussed in detail in the 2007 NPRM, 72 FR 54123–54138. In addition, significant comments on each of the three options,

and our responses to them, are provided in this section V of this preamble.

In this final rule, after considering the available information and comments from interested parties, EPA has decided to select Option 1 and establish

increments for $PM_{2.5}$ using the “contingent safe harbor” approach in accordance with the authority provided in section 166(a) of the Act.

This final rule establishes increments for $PM_{2.5}$ at the following levels:

Averaging period	NAAQS ($\mu\text{g}/\text{m}^3$)	Increments ($\mu\text{g}/\text{m}^3$)		
		Class I	Class II	Class III
Annual	15	1	4	8
24-hour	35	2	9	18

B. Rationale for the Applicability of Section 166(a)

In the 2007 NPRM, we expressed our belief that it is permissible to interpret section 166(a) to apply to $PM_{2.5}$. Section 166(a) requires EPA to develop regulations to prevent the significant deterioration of air quality due to emissions of certain named pollutants, and to develop such regulations for any pollutants for which NAAQS are subsequently promulgated. Although EPA has generally characterized the NAAQS for $PM_{2.5}$ as a NAAQS for a new indicator of PM, EPA did not replace the PM_{10} NAAQS with the NAAQS for $PM_{2.5}$ when the latter NAAQS were promulgated in 1997. Rather, EPA retained the annual and 24-hour PM_{10} NAAQS (retaining PM_{10} as an indicator of coarse particulate matter), and established new annual and 24-hour NAAQS for $PM_{2.5}$ as if $PM_{2.5}$ was a new pollutant, even though EPA had already developed air quality criteria for PM generally. Thus, for purposes of section 166(a), the promulgation of a NAAQS for $PM_{2.5}$ established a NAAQS for an additional pollutant after 1977.

Nine commenters supported our proposed Option 1, although only three of these explicitly expressed support for the use of section 166(a) authority to promulgate $PM_{2.5}$ increments. Ten other commenters specifically opposed the use of section 166(a) authority and/or supported the use of section 166(f) authority (on which the annual increments under Options 2A and 2B were based).

One of the commenters who explicitly agreed with our proposed use of section 166(a) authority stated that it is the only option that is legally available. This commenter asserted that section 166(a) plainly applies to $PM_{2.5}$ because $PM_{2.5}$ is a pollutant for which NAAQS were promulgated after August 7, 1977. This commenter held that EPA’s rulemaking duty under section 166(a) is not confined to “new pollutants,” but is triggered by post-1977 NAAQS promulgations, regardless of whether for new or previously regulated pollutants.

On the other hand, this commenter noted that by its terms, section 166(f) is limited to authorizing the adoption of PM_{10} increments as a substitute for the statutory TSP increments and does not provide for substitution of $PM_{2.5}$ increments for TSP or PM_{10} increments.

The opposing commenters did not believe that section 166(a) provides a legal basis for EPA to promulgate $PM_{2.5}$ increments. One of these commenters stated that section 166(a) can only be used for a new pollutant, and $PM_{2.5}$ is not a new pollutant.

Another commenter who opposed the use of section 166(a) authority argued that nothing in section 166(a) of the Act can be interpreted to allow it to be used as the basis of increments when EPA revises an existing NAAQS. The commenter explained that, on its face, section 166(a) can only be interpreted to apply to pollutants other than PM and SO_2 since increments for these pollutants were enacted by Congress in section 163 of the Act. The commenter added that it can be argued that Congress intended to have section 166(a) apply to the four other pollutants specifically listed there.

This commenter found unpersuasive our argument that we are not “substituting” increments (as section 166(f) requires for PM_{10}) but rather adding $PM_{2.5}$ increments to the existing PM_{10} increments, and that only section 166(a) allows such an approach (72 FR 54121). The commenter asserted that if EPA had defined a coarse fraction to the particulate matter standards, then that fraction, together with the $PM_{2.5}$ standards, would form the set of “substituted” new standards for the existing PM_{10} standards, and, thus, the increments.

The commenter also disagreed with EPA’s argument that it can treat $PM_{2.5}$ as a new pollutant under section 166(a) of the Act since it has been demonstrated that sub- $PM_{2.5}$ particles have distinctly different health and welfare effects than the other forms of PM (i.e., coarse or PM_{10}). The commenter indicated that just as EPA replaced the TSP standards

by PM_{10} as a better indicator of health effects, ongoing research has led to establishment of the $PM_{2.5}$ standards as a better indicator of certain health effects, and it is the natural outcome of such research that has enabled EPA to separate the effect of total particulate matter into two fractions with distinct effects. The commenter added that given that the definition of particulate matter includes a vast conglomeration of solids and liquids, the finding of differing effects should not come as a surprise. The commenter explained that as is the case of different pollutants having similar effects that are, nonetheless, treated as separate pollutants, the same concept should apply to a range or fraction of particulate matter found to have different effects in establishing it as another indicator and not a different pollutant.

The commenter did not disagree with the specific numerical increments proposed by EPA under Option 1, but did have concerns with the potential consequences of the section 166(a) approach. The commenter’s primary concern was the proposal to allow states to substitute other measures in the place of uniform national increments for $PM_{2.5}$. (This is discussed further in section V.C.5 of this preamble.) Another commenter also expressed this concern.

Another commenter who opposed the section 166(a) approach believes that the legal and congressional history regarding the establishment of PM increments shows that Congress added section 166(f) to the Act based on the conviction that without it, EPA had no authority to revise the PM increments for PM_{10} (citing and quoting from S. Rep. No. 228, 101st Cong., 2nd Sess. 75 (1990), reprinted in 1990 U.S.C.C.A.N. 3385, 3461). The commenter concluded that EPA did not have authority in 1987 under section 166(a) to adopt PM_{10} increments, and does not have authority now under section 166(a) to adopt $PM_{2.5}$ increments.

We read section 166(a) to authorize EPA to promulgate pollutant-specific PSD regulations meeting the

requirements of sections 166(c) and 166(d) for any pollutant for which EPA promulgates a NAAQS after 1977. Most of the pollutants identified in section 166(a) (NO_x, photochemical oxidants, carbon monoxide) are pollutants for which EPA had established NAAQS in 1977 when Congress adopted section 166 of the Act. There was no need for Congress to list other criteria pollutants, SO₂ and PM, in section 166(a) because Congress had already established increments for these pollutants in section 163 of the Act. In addition to requiring regulations for the enumerated pollutants, we conclude that under section 166 of the Act Congress intended to authorize EPA to establish additional pollutant-specific PSD regulations, potentially containing increments, for any additional pollutants for which EPA promulgated a NAAQS under section 109 of the Act. Furthermore, because the Act refers to pollutants for which EPA promulgates NAAQS after 1977, and does not use the phrase "additional pollutants," section 166(a) provides authority for EPA to promulgate new increments after revising an existing NAAQS (including NAAQS first promulgated before 1977), when we find that such action is appropriate.

Moreover, any new increments developed pursuant to section 166(a) have no effect on existing increments, as there is no indication therein that an existing increment should be revoked or replaced when additional increments are promulgated. This was the situation following the promulgation of new NAAQS for PM in 1987 when EPA replaced the old NAAQS based on TSP with new ones based on PM₁₀. Had Congress not added new section 166(f) in 1990, increments for PM₁₀ could have been developed pursuant to section 166(a) of the Act, but such increments would have had no effect on the original statutory increments for PM (based on TSP). Consequently, seeing no basis for retaining the original increments, Congress added section 166(f) which explicitly provides for the replacement of the existing increments with PM₁₀ increments.

One commenter asserted that if EPA establishes increments for PM_{2.5} under the authority of section 166(a) on the basis that PM_{2.5} is a new pollutant, then it must also establish PM₁₀ increments under section 166(a) because (according to the commenter's analysis) PM₁₀ is also a new pollutant. In the same analysis, the commenter concluded that EPA must adopt new measures to prevent significant deterioration from coarse PM based on section 166(a).

In this final rule, EPA is not setting or amending any increments for PM₁₀ or otherwise taking action with respect to PM₁₀ increments. The preexisting annual and 24-hour increments for PM₁₀ are being retained. See section V.H. Similarly, EPA is not taking any action with respect to coarse PM in this rule. For these reasons, the commenter's arguments on what authority must be used to set increments for PM_{2.5} and/or coarse PM, and that EPA has some obligation to take action with respect to coarse PM, are not on point for this rule. Thus, no substantive response to this comment is needed. Nevertheless, as mentioned earlier, Congress provided explicit authority under section 166(f) of the Act to address increments for PM_{2.5} because it intended for such increments to be substitute increments for the original statutory increments for PM measured as TSP. Thus, the PM₁₀ increments legally supersede the original statutory increments for PM. Had the PM_{2.5} increments been developed under section 166(a), which prior to the 1990 Act Amendments was the only authority available for developing new increments, then the original statutory PM increments would have remained in effect in addition to the PM₁₀ increments.

One commenter expressed general objections to EPA's legal rationale for the PM_{2.5} increments proposal, asserting that we failed to expressly state and support our legal authority for the PM_{2.5} increments, offering two possible sources of authority ("contingent safe harbor," "equivalent substitution," or possibly a combination of the two) but never stating our legal position with clarity. The commenter agreed with EPA's assessment that the PM_{2.5} increments should and must fulfill the legal requirements of the Act (72 FR 54121), and added that it is the government's burden of proof to establish its legal authority for action. The commenter stated that it would be arbitrary and capricious to promulgate these regulations for which EPA has not stated legal authority.

We do not disagree that the 2007 NPRM described two different legal authorities for the two different options for establishing increments, but we disagree that these discussions did not clearly present the alternative legal bases that the Agency was considering for taking action in this rule. In particular, we clearly described our legal authority for developing the 24-hour and annual PM_{2.5} increments under section 166(a) of the Act, which is the basis on which we are taking final

action in this rule.⁷ First, we expressly stated that Option 1 was based on the statutory authority of section 166(a) of the Act. See 72 FR 54123 (Under the first option, "we would use the authority of section 166(a) of the Act to develop new increments for PM_{2.5}"). Second, we provided a discussion of this authority both in general (see 72 FR 54118–54119 and 54120–54123), and how it would be applied to establish increments for PM_{2.5} (see 72 FR 54119–120 and 54123–136).

We now believe that section 166(a) provides the most straightforward approach for developing increments for a pollutant or pollutant indicator for which no increments have yet been established. Our position is also consistent with the comments we received which supported the delay in implementation of the PM_{2.5} increments, opposed the potential for two sets of definitions for "major source baseline date" and "trigger date" for the PM_{2.5} increment system, and highlighted the complexities involved with having to establish and maintain two sets of emissions inventories for the 24-hour and annual PM_{2.5} increments. (See further description of relevant comments in section VIII of this section.)

C. EPA's Interpretation of the Requirements Under Sections 166(a)–(d) of the Act

In section 166(a) of the Act, Congress directed EPA to develop pollutant-specific regulations to prevent significant deterioration of air quality. Congress further specified that such regulations meet specific requirements set forth in sections 166(c) and 166(d) of the Act. We stated in the 2007 NPRM that because we believed that section 166(a) could be applied to the development of increments for PM_{2.5}, we would follow the interpretation of sections 166(a)–(d) that the Agency adopted in its most recent NO₂ increments rule, 70 FR 59582, October 12, 2005. That particular interpretation and application was upheld in *Environmental Defense v. EPA*, 489 F.3d 1320 (D.C. Cir. 2007).

The EPA's interpretation of these provisions is grounded on five principles and conclusions. First, we read section 166 of the Act to direct EPA to conduct a holistic analysis that considers how a complete system of regulations will collectively satisfy the

⁷ We also believe that we sufficiently described how section 166(f) might provide alternative authority for establishing increments for PM_{2.5} (see, e.g., 72 FR 54120–54121), but will not address that in detail here because the increments in this rule are not based on section 166(f) authority.

applicable criteria, rather than evaluating one individual part of a regulatory scheme in isolation. Second, we use a "contingent safe harbor" approach which calls for EPA to first determine an increment that is at least as effective as the increments in section 163 of the Act, as required under section 166(d) and then to conduct further analysis to determine if additional measures are necessary to fulfill the requirements of section 166(c). Third, we interpret section 166(c) of the Act to identify eight statutory factors that EPA must apply when promulgating pollutant-specific regulations to prevent significant deterioration of air quality. Fourth, where these factors are at odds with each other, we interpret the statute to require EPA to use its judgment to balance the conflicting factors. Fifth, we recognize that the requirements of section 166 may be satisfied by adopting other measures besides an increment and that EPA may allow states to demonstrate that alternatives to increments contained in a SIP meet the requirements of sections 166(c) and 166(d). Below is a brief discussion of each of these five principles and conclusions. A more detailed description of each of these is contained in the 2007 NPRM at 72 FR 54121–54123.

1. Regulations as a Whole Should Fulfill Statutory Requirements

Section 166(a) of the Act directs EPA to develop pollutant-specific regulations to prevent the significant deterioration of air quality. Sections 166(c) and 166(d) provide detail on the contents of those regulations, but do not necessarily require the same type of increment system Congress created in section 163 of the Act. The EPA interprets section 166 to require that the entire system of PSD regulations (the framework and details, as described in section V.D of this preamble) for a particular pollutant must, as a whole, satisfy the criteria in sections 166(c) and 166(d) of the Act.

2. Contingent Safe Harbor Approach

Section 166(c) of the Act describes the kinds of measures to be contained in the regulations to prevent significant deterioration of air quality called for in section 166(a) and specifies that these regulations are to "fulfill the goals and purposes" set forth in sections 160 and 101 of the Act. Section 166(d) of the Act directs EPA to "fulfill such goals and purposes" by providing "specific measures at least as effective as the increments established in section 163 * * *." Thus, EPA reads section 166(d) to require that the Agency identify "safe

harbor" pollutant-specific PSD regulations adopted under section 166.

The EPA reads section 166(c) to require that the Agency conduct further review to determine whether, based on the criteria in section 166(c), EPA's pollutant-specific PSD regulations under section 166 should contain measures that are different from the "safe harbor" identified under section 166(d). The EPA construes section 166(d) to require that the measures be "at least as effective" as the statutory increments set forth in section 163.

To apply the "contingent safe harbor" approach for PM_{2.5}, we first identified "safe harbor" increments for each area classification (Class I, II, or III), using: (1) Equivalent percentages of the NAAQS as the percentages used for developing the statutory increments; (2) the same pollutant as the NAAQS, i.e., PM_{2.5}, and (3) the same time (averaging) periods as were used for the PM_{2.5} NAAQS. We concluded that this approach would ensure that the increments would be "at least as effective as the increments established in section 163," as required by section 166(d). Second, EPA conducted further review to determine whether the "safe harbor" increments, in conjunction with existing elements of the PSD program or additional measures proposed under section 166 to augment the increments, sufficiently fulfill the criteria in subsection (c) of section 166.

In this review, we weighed and balanced the criteria set forth in subsection (c) (and, as provided in subsection (c), the incorporated goals and purposes of the Act in section 101 and the PSD program in section 160) to determine whether additional measures might be needed to satisfy the criteria in subsection (c). See section V.E.6 of this preamble for further discussion of our evaluation, comments on the evaluation, and our response to them.

3. The Statutory Factors Applicable Under Section 166(c)

The EPA interprets section 166(c) of the Act to establish eight factors to be considered in the development of PSD regulations for the pollutants covered by this provision. These eight factors included the three criteria stated in section 166(c) and the five goals and purposes identified in section 160 of the Act (which, as noted below, also cover the goals and purposes set forth in section 101). The three stated criteria in section 166(c) indicate that PSD regulations for specific pollutants should provide: (1) Specific numerical measures for evaluating permit applications; (2) a framework for stimulating improved control

technology, and (3) protection of air quality values. The five goals and purposes in section 160 are incorporated into the analysis by virtue of the fourth criterion in section 166(c), which directs that EPA's pollutant-specific PSD regulations "fulfill the goals and purposes" set forth in sections 160 and 101 of the Act. We construed the term "fulfill the goals and purposes," as used in section 166(c), to mean that EPA should apply the goals and purposes listed in section 160 as factors applicable to pollutant-specific PSD regulations established under section 166. The Agency's view is that PSD measures that satisfy the specific goals and purposes of section 160 also satisfy the more general purposes and goals identified in section 101 of the Act. See 72 FR 54122.

One commenter disagreed with our interpretation that the goals and purposes of section 160 also satisfy all of those in section 101. This commenter asserted that although there is some overlap between the two sections, they are not identical. As an example, the commenter noted that section 101 expressly states that a primary goal of the Act is to promote pollution prevention—a goal not stated in section 160. The commenter asserted that, although the proposed increments would limit some pollution increases, there was no provision in the proposal that would require or promote pollution prevention.

We disagree with the commenter and continue to believe that measures that satisfy the specific goals and purposes of section 160 also satisfy the more general purposes and goals identified in section 101 of the Act. As we stated in the 2005 NO₂ increment rulemaking, the overall goals and purposes of the Act listed in sections 101(b) and 101(c) are general goals regarding protecting and enhancing the nation's air resources and controlling and preventing pollution. Because these broad goals are given more specific meaning in section 160, EPA does not believe it is necessary to consider them in detail when evaluating whether PSD regulations satisfy the criteria in section 166(c). 70 FR 59587 FN 3.

Regarding pollution prevention specifically, we believe that this general goal is encompassed in, and given more specific meaning by, sections 160(1), 160(2), and 160(4) of the Act. These sections spell out the specific purposes under the PSD program for the general section 101 goals of controlling and preventing pollution. We believe that any requirement to limit or reduce emissions serves to promote pollution prevention, which is often the most cost

effective means of lowering pollutant emissions.

In addition to citing the purposes set out in section 160, section 166(c) includes the criterion that pollutant-specific PSD regulations should provide a framework for stimulating improved control technology. As discussed subsequently in sections V.D.1 and V.D.6 of this preamble, we believe that this criterion is fulfilled by the system of increments for $PM_{2.5}$ and by the requirement for PSD permittees to apply BACT to minimize $PM_{2.5}$ emissions. In stimulating improved control technology generally, these elements of the PSD program also promote pollution prevention. As noted previously, pollution prevention is often the most cost effective means of control, particularly for new sources and new process lines at existing sources. In addition, because BACT is a case-by-case determination that considers cost and collateral environmental impacts, pollution prevention, where technically feasible, often fairs well in BACT analyses because it is typically free from the negative environmental impacts that result from the use of add-on air pollution control devices.

4. Balancing the Factors Applicable Under Section 166(c)

While the eight factors in section 166(c) are generally complementary, there are circumstances where some of the objectives may be in conflict with each other. In these situations, some degree of balance or accommodation is inherent in the requirement to establish regulations that satisfy all of these factors. As first discussed in our 2005 NO_2 increments rulemaking (70 FR 59582 at 59587), we believe this balancing test derives primarily from the third goal and purpose set forth in section 160: To insure economic growth consistent with the preservation of existing clean air resources. A more detailed discussion of how the balancing of factors should be interpreted is contained in the 2007 NPRM at 72 FR 54122–54123.

One commenter claimed that EPA “incorrectly and repeatedly asserts” that a goal of section 160 of the Act is to insure economic growth. The commenter claimed that neither section 160 nor section 101 of the Act uses language to support a goal of promoting or maximizing opportunities for economic growth. Instead, the commenter asserted that both sections state only that any growth that does occur must be consistent with protection of air quality. The commenter concluded that “EPA’s notion that the need to satisfy the other requirements of

Section 166 and other goals and purposes in Sections 101 and 160 can never preclude additional emissions from economic growth unlawfully elevates such growth over all other statutory factors.”

The language in section 160(3) provides that one of the purposes of the PSD program is “to insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources.” The commenter suggests that this language can only be read as if the statutory phrase “economic growth” actually said “any economic growth that does occur” such that section 160(3) says “to insure that any economic growth that does occur will occur in a manner consistent with the preservation of existing clean air resources.” We disagree; the phrasing used by Congress is “to insure that economic growth will occur.” Thus, we believe the plain language of the statute supports EPA’s reading that section 160(3) requires a balancing of the goals of (1) economic growth and (2) preservation of existing clean air resources. At a minimum, if the language were to be considered ambiguous enough to allow the commenter’s reading, then the Agency’s interpretation is also a reasonable reading of the statutory language.

5. Authority for States To Adopt Alternatives to Increments

While section 165 of the Act authorizes EPA to promulgate increments for pollutants listed under section 166(a), we have also interpreted the section to allow states to employ approaches other than increments to prevent significant deterioration of air quality, so long as such an approach otherwise meets the requirements of sections 166(c) and 166(d). This interpretation was explained in the 2005 NO_2 increment rulemaking (70 FR 59611–59612), in which we amended the PSD regulations at 40 CFR 51.166 by adding new paragraph (c)(2) to codify this statutory authority. Under the existing provision in 40 CFR 51.166(c)(2), states may seek EPA approval of SIPs that use an alternative approach to increments if the State can demonstrate that the alternative program satisfies the requirements of sections 166(c) and 166(d). However, the current language at paragraph (c)(2) states the authority for states to adopt alternative measures only with respect to increments for NO_2 . To clarify our interpretation that the authority to adopt alternative measures covers any pollutant listed in section 166(a), we are revising 40 CFR 51.166(c)(2) to make it

inclusive to all applicable pollutants rather than just NO_2 .

Two commenters supported our proposal to revise paragraph (c)(2) to include $PM_{2.5}$, while four State/local agency commenters expressed opposition. An environmental commenter agreed that the Act allows for other approaches, but believes that such approaches must be in addition to the national increments. Specifically, this commenter stated that “although EPA can provide for states to adopt approaches in addition to increments in order to fulfill the statutory purposes, the agency must make clear that states cannot adopt approaches that are less protective than the national increments.” This commenter further stated that “to the extent that EPA is suggesting that it can allow states to adopt PSD programs that do not include the minimum Federal increments, that position is contrary to the statute.”

As in the 2005 NO_2 increment rulemaking, we are codifying the basic principle that states can seek to use alternative measures without defining any specific type of alternative program that would be approved or otherwise creating standards beyond the requirements of sections 166(c) and 166(d). Instead, we plan to make determinations on a case-by-case basis when a State submits a specific alternative approach for EPA to approve as part of a SIP. In making those determinations, we will address the specific alternative measures as states propose them to the Agency in light of the requirements of sections 166(c) and 166(d), including whether the alternative program is “at least as effective as the increments established in section 163,” as required in section 166(d).

The four State/local agency commenters opposing the revision to 40 CFR 51.166(c)(2) expressed the importance of using uniform national increments for $PM_{2.5}$. One commenter argued that a nationally inconsistent approach to $PM_{2.5}$ in attainment areas could result in a patchwork of State PSD regulations—and the exact kinds of economic repercussions that Congress wished to avoid. The same commenter argued that varying increment-equivalent measures could also result in an uneven playing field for industry and could exacerbate difficulties between states experiencing transport problems.

Another opposing commenter was concerned that allowing states to adopt alternatives to increments would likely lead to a “mish-mash” of State approaches which defeats the intention of Congress that there be uniformity in PSD rules to avoid economic

dissimilarities from State to State that could allow interstate competition for industry based upon which State offers the best (least expensive) environmental compliance regulations. Another commenter objected to allowing the use of alternatives to increments by stating that such alternative allowances undermine the desired national consistency, and EPA has failed to even identify any Act programs which would benefit from this approach.

While we acknowledge the potential problems identified by the commenters associated with allowing states to adopt alternative approaches to the numerical increments that we are establishing, we also note that section 166(d) expressly gives EPA some latitude in promulgating regulations that will be at least as effective as the increments in section 163, by stating that such regulations "may contain air quality increments, emission density requirements, or other measures." Thus, EPA is authorized to provide that states may consider alternatives to the increments established in this rule. That said, the statutory authority is not a blank check for states to do as they please, but enables states to consider options that may provide a meaningful way for them to manage their air resources within the framework allowed by the statutory PSD requirements.

D. Framework for Pollutant-Specific PSD Regulations for PM_{2.5}

In the 2007 NPRM, we proposed to apply the same basic framework for pollutant-specific PSD regulations for PM_{2.5} that we used in our 2005 NO₂ increments regulations. Specifically, we proposed adopting an increment and area classification system for PM_{2.5} and applying the statutory AQRV review process to PM_{2.5} as well. We also indicated that while some of the factors applicable under section 166(c) are fulfilled by using this type of framework for pollutant-specific PSD regulations under section 166(a) of the Act, this framework of regulations also needs to satisfy the other applicable factors. Thus, the details of our regulations (such as the characteristics of the increments themselves) are important, and we evaluated the effectiveness of the framework in conjunction with more detailed elements of our regulations. As discussed in the following subsections, we believe our obligations under section 166(c) of the Act are satisfied when the PSD regulations collectively satisfy the factors applicable under 166(c) of the Act.

1. Increment System

An increment-based program satisfies the requirements under 166(c) to provide "specific numerical measures against which permit applications may be evaluated." An increment is the maximum allowable level of ambient pollutant concentration increase that is allowed to occur above the applicable baseline concentration in a particular area. As such, an increment defines "significant deterioration." Establishing an increment system for PM_{2.5} will fulfill two of the factors applicable under section 166(c): (1) Providing specific numerical measures to evaluate permit applications, and (2) stimulating improved control technology.

First, under section 165(a)(3) of the Act, a permit applicant must demonstrate that emissions from the proposed construction and operation of a facility "will not cause, or contribute to, air pollution in excess of any (A) maximum allowable increase or maximum allowable concentration for any pollutant * * *." Once the baseline date associated with the application for the first new major stationary source or major modification in an area is established, the new emissions from that source consume a portion of the increment in that area, as do any subsequent emissions increases that occur from any source in the area. When the maximum pollutant concentration increase defined by the increment has been reached, additional PSD permits cannot be issued until sufficient amounts of the increment are "freed up" via emissions reductions that may be required by the reviewing authority. Thus, an increment is a quantitative value that establishes a "maximum allowable increase" for a particular pollutant. It functions, therefore, as a specific numerical measure that can be used to evaluate whether an applicant's proposed project will cause or contribute to air pollution in excess of allowable levels.

Increments also satisfy the second factor in section 166(c) by providing "a framework for stimulating improved control technology." Increments establish an incentive to apply improved control technologies in order to avoid violating the increment and to "free up" available increment to promote continued economic growth. These control technologies may become the basis of BACT determinations elsewhere, as the technologies become more commonplace and the costs tend to decline.

One commenter stated that, although increments may encourage the use of existing control technologies, EPA has

not cited any evidence that increments actually stimulate the development of improved technologies. Moreover, the commenter asserted that even if increments provide the incentive asserted by EPA, any encouragement of improved control technology is wholly incidental and hardly amounts to a "framework" whose purpose is to stimulate such technology.

We continue to believe that the total program, encompassing increments and BACT, does provide an appropriate framework to stimulate BACT in such a way that it is not simply "wholly incidental," as the commenter claims. The fact that economic growth in an area must occur within a defined amount of allowable air quality deterioration should logically lead to the application of improved pollution control technology as the amount of deterioration increases, and should not be regarded as an incidental consequence. As stated in the 2007 NPRM, Congress envisioned that the increments they originally established would serve as an incentive: "The incremental ceiling should serve as an incentive to technology, as a potential source may wish to push the frontiers of technology in a particular case to obtain greater productive capacity with the limits of the increments." S. Rep. 95-127 at 18, 30 (3 LH at 1392, 1404). We, too, believe that as the available increment in an area becomes smaller, and as states try to preserve some of the remaining increments for future growth, it will be necessary to require sources to install more stringent controls in that area. Such levels of control ultimately must be considered in subsequent BACT evaluations in other PSD areas throughout the country. Admittedly, the increasing stringency of control technologies over time, as observed in EPA's BACT/Lowest Achievable Emission Rate (LAER) Clearinghouse, supports but cannot in itself conclusively demonstrate that the PSD program has already stimulated development of improved control technology; there are undoubtedly a number of factors that could cause such trends. Nevertheless, even the need to require a more stringent BACT determination in only a few PSD areas (due to dwindling increment availability) necessitates consideration of that level of control for all other PSD sources wherever they may decide to locate. In any event, while the commenter generally questions the effectiveness of the increments as an incentive for tightening BACT, they provided no evidence that more stringent BACT is not related to the

increment system established as an integral part of the PSD program.

2. Area Classifications

In this final rule, EPA is establishing the same three-tiered area classification system for $PM_{2.5}$ that is applicable to the increments for NO_2 and other pollutants under the PSD program and the Act. Accordingly, areas that are currently Class I for other pollutants will also be Class I for $PM_{2.5}$ and all other areas will be Class II for $PM_{2.5}$ unless we redesignate the area based on a request by a State or tribe pursuant to the process in section 164 of the Act and EPA's regulations at 40 CFR 51.166(g) and 52.21(g).

As explained earlier in section IV.E.1, Class I areas are areas where very clean air is most desirable; in contrast, Class III areas are designed as those areas in which a State wishes to permit the highest relative level of industrial development, and thus allow the largest incremental increase in pollution. Areas that are not especially sensitive and where states have not provided for a higher level of industrial growth are classified as Class II. When Congress established this three-tiered scheme for SO_2 and PM, it intended that Class II areas be subject to an increment that allows "moderately large increases over existing pollution." H.R. Rep. 95-294, 4 LH at 2609.

Establishing increments at different levels for each of the three area classifications helps to fulfill two of the factors applicable under section 166(c) of the Act. First, establishing the smallest increments in Class I areas helps fulfill EPA's obligation to establish regulations that "preserve, protect, and enhance the air quality" in parks and special areas. Class I areas are primarily the kinds of parks and special areas covered by section 160(2) of the Act. Second, by providing for two additional area classifications with increment levels that are higher but still protective, the area classification system helps satisfy the goal in section 160(3) of the Act that EPA "insure that economic growth will occur in a manner consistent with preservation of clean air resources." In those areas where clean air resources may not require as much protection, more growth is allowed. By employing an intermediate level (Class II areas) and higher level (Class III areas), this classification scheme helps ensure that growth can occur where it is needed (Class III areas) without putting as much pressure on existing clean air resources in other areas where some growth is still desired (Class II areas).

By requesting that EPA redesignate an existing Class II area to Class III, states may accommodate economic growth and air quality in areas where the Class II increment is too small to allow the siting of new or modified sources. The procedures specified by the Act for such a redesignation require a commitment by the State government to create such an area, extensive public review, local government participation in the SIP area redesignation process, and a finding that the redesignation will not result in the applicable increment being exceeded in a nearby Class I or Class II area. See sections 164(a) and (b) of the Act. (No State has yet requested a Class III redesignation.) The EPA believes that the three-tiered classification system has allowed for economic growth, consistent with the preservation of clean air resources.

However, an area classification system alone may not completely satisfy the factors applicable under section 166(c) of the Act. The increment that is employed for each class of area is also relevant to an evaluation of whether the area classification system achieves the goals of the PSD program. We briefly discuss the characteristics of increments in section V.E.5.

One commenter took issue with our assessment of the two factors that we believe a classification system helps to fulfill. As discussed previously in section V.C.4, the commenter asserted that EPA has unlawfully interpreted section 160(3) of the Act to elevate economic growth over all other statutory factors. As explained in greater detail in section V.C.4, we disagree that our interpretation elevates economic growth over other factors, and believe that the plain language of the statute supports EPA's reading that section 160(3) requires a balancing of the goals of (1) economic growth and (2) preservation of existing clean air resources.

The commenter also stated that EPA has failed to demonstrate that the classification system and safe harbor increments, in combination with the other elements of the regulatory framework, will "preserve, protect, and enhance the air quality" in parks and special areas as required under section 160(2) of the Act. These comments and our response to them are found in section V.E.6 of this preamble where we discuss our evaluation of the safe harbor increments.

3. Permitting Procedures

Two of the factors applicable under section 166(c) are fulfilled by the case-by-case permit review procedures that are built into our existing PSD regulations. The framework of our

existing PSD regulations employs the preconstruction permitting system and procedures required under section 165 of the Act. These requirements are generally reflected in 40 CFR 51.166 and 52.21 of EPA's PSD regulations. These permitting and review procedures, which apply to construction of new major sources and to major modifications, fulfill the goals set forth in sections 160(4) and 160(5) of the Act. These goals require that PSD programs in one State not interfere with the PSD programs in other states and that PSD programs assure that any decision to permit increased air pollution is made after careful evaluation and public participation in the decision-making process. For the same reasons discussed in our proposal for the pollutant-specific NO_2 increments regulations (70 FR 8896, February 23, 2005), we believe these factors are also fulfilled for $PM_{2.5}$ by employing the permit review procedures.

4. AQRV Review by Federal Land Manager and Reviewing Authority

In this final rule, we apply the existing requirements to evaluate impacts on AQRVs in Class I areas (see existing 40 CFR 51.166(p) and 52.21(p)) to $PM_{2.5}$. The existing requirements for an AQRV review, which Congress applied to SO_2 and TSP, provide Federal land managers (FLMs) with the responsibility to review source impacts on site-specific AQRVs in Class I areas and to bring any alleged adverse impacts to the attention of the reviewing authority. Under an increment approach, we consider this review to be an additional measure that helps satisfy the factors in sections 166(c) and 160(2) which require EPA's pollutant-specific PSD regulations to protect (1) air quality values, and (2) parks and other special areas, respectively.

Two State/local agency commenters supported our proposal to apply the requirements to evaluate impacts on AQRV in Class I areas to $PM_{2.5}$ review. However, one commenter indicated that FLM review does not and cannot assure the prevention of all significant $PM_{2.5}$ -related deterioration because it applies only to the construction or modification of very large stationary sources (e.g., factories and power plants) affecting Class I areas. This commenter pointed out that Class I areas do not include Bureau of Land Management wilderness and wilderness study areas (encompassing more than 15 million acres), 341 of the nation's 390 national park units (only 49 national parks are Class I), and many U.S. Forest Service lands (including a number of wilderness areas). The commenter added that FLM

review does not help to fulfill section 160(2)'s goal of preserving and protecting air quality in "other areas of special national or regional natural, recreational, scenic, or historic value," such as State and local parks, wildlife refuges, recreation areas, lakes, and historic areas, none of which are Class I areas. In addition, the commenter noted that FLM review does not apply to emissions increases from sources of $PM_{2.5}$ and precursor pollution other than major stationary sources, such as motor vehicles and non-major industrial sources (which are sources that emit substantial amounts of $PM_{2.5}$ and precursors). *Alabama Power v. Costle*, 636 F.2d 323, 362 (D.C. Cir. 1979) (*Alabama Power*) (expressly recognizing that "[s]ignificant deterioration may occur due to increased emissions from unregulated minor sources.").

The commenter also asserted that FLM review is of limited reach even where it does apply. Under the current PSD regulations, a State must consider an FLM's objections and must justify its decision in writing when it disagrees with those objections, but the State can still issue a PSD permit over those objections unless emissions are predicted to cause an exceedance of the applicable increment. The commenter believes that, given these limitations, EPA cannot plausibly claim that the existing provision for FLM review ensures the preservation, protection, and enhancement of air quality for parks and natural areas throughout the nation as required by section 160(2) of the Act.

In our rulemakings addressing PSD for NO_x , EPA extended the AQRV review procedures set forth in 40 CFR 51.166(p) and 52.21(p) to cover NO_2 . These AQRV review procedures were established based on section 165(d) of the Act, and they were originally applied only in the context of the statutory increments for PM and SO_2 . However, because they also address many of the factors applicable under section 166(c) of the Act, EPA also applied them to NO_x through regulation. In this final rule, we are amending the existing PSD regulations to extend, as proposed, the AQRV review procedures to include $PM_{2.5}$ by explicitly including $PM_{2.5}$ in the regulatory text that now simply references "particulate matter." See new 40 CFR 51.166(p)(4) and 52.21(p)(5).

Section 165(d) creates a scheme in which the FLM and reviewing authority must review the impacts of a proposed new or modified source's emissions on AQRVs. The Act assigns to the FLM an "affirmative responsibility" to protect the AQRVs in Class I areas. This is in notable contrast to the reviewing

authority's responsibility for protecting the increments—including Class I increments. The FLM may object to or concur in the issuance of a PSD permit based on the impact, or lack thereof, that new emissions may have on any affected AQRV that the FLM has identified and for which information is available to the general public. If the proposed source's emissions are shown not to cause or contribute to a violation of a Class I increment, the FLM may still prevent issuance of the permit by demonstrating to the satisfaction of the reviewing authority that the source or modification will have an adverse impact on AQRVs. Section 165(d)(2)(C). On the other hand, if the proposed source is shown to cause or contribute to a violation of a Class I increment, the reviewing authority (State or EPA) shall not issue the permit unless the owner or operator demonstrates to the satisfaction of the FLM that there will be no adverse impact on AQRVs.¹⁸ Thus, the showing of compliance with the increment determines whether the FLM or the permit applicant has the burden of satisfactorily demonstrating whether or not the proposed source's emissions would have an adverse impact on AQRVs.¹⁹ In any event, the FLM plays an important and material role by raising these issues for consideration by the reviewing authority, which in the majority of cases will be the State.

Extending the AQRV review procedures of the PSD regulations to $PM_{2.5}$ helps to provide protection with respect to potential adverse effects from $PM_{2.5}$ for parks and special areas (which are generally the Class I areas subject to this review) not afforded by the increment system alone. As discussed later, we believe the factors applicable under section 166(c) of the Act can be fulfilled when the review of AQRVs is

¹⁸ Even if such a waiver of the Class I increment is allowed upon a finding of no adverse impact, the source must comply with such emissions limitations as may be necessary to ensure that alternative increments specified in the rules for SO_2 or PM are not exceeded. The alternative increments are generally at the level of the Class II increments, with the lone exception being a more restrictive 3-hour increment for SO_2 . Section 165(d)(2)(C)(iv). The EPA made this provision applicable to the PSD provisions for NO_x at the level of the NO_2 Class II increment (53 FR 3704; 51 FR 40656) and substituted the PM_{10} Class II increments for the statutory alternative PM increments, which were based on TSP (58 FR 31622). This final rule expands this provision to include the $PM_{2.5}$ Class II increments as well. See 40 CFR 51.166(p)(4) and 52.21(p)(5).

¹⁹ In response to concerns that Class I increment would hinder growth in areas surrounding the Class I area, Congress established Class I increments as a means of determining where the burden of proof should lie for a demonstration of adverse effects on AQRVs. See Senate Debate, June 8, 1977 (3 LH at 725).

applied in conjunction with increments and other aspects of our PSD regulations. In those cases where the increment is not violated and the reviewing authority agrees that a proposed project will adversely affect AQRVs, the parks and other special areas will be protected by denying issuance of the permit or by requiring the applicant to modify the project to alleviate the adverse impact.

We read the legislative history to show that Congress intended the AQRV review provisions of section 165(d) to provide a special layer of protection, beyond that provided by increments. The Senate committee report stated the following:

A second test of protection is provided in specified Federal land areas (Class I areas), such as national parks and wilderness areas; these areas are also subjected to a review process based on the effect of pollution on the area's air quality related values."

S. Rep. 95-127, at 17, 4 LH at 1401.

As we stated in the NO_2 increment rule, we believe the term "air quality values" should be given the same meaning as "air quality related values." Legislative history indicates that the term "air quality value" was used interchangeably with the term "air quality related value" (AQRV) regarding Class I lands.²⁰

The commenter is correct that the FLM (or AQRV) review applies only to Class I areas, and not to other "special" areas such as the numerous State and local parks and some other areas that could be seen as being covered by the protective purposes of section 160(2) of the Act. This level of coverage by FLM review to protect AQRVs was established by Congress when it enacted the PSD program, including the purposes set out in section 160(2). Thus, we conclude that Congress believed that the special areas not designated as Class I areas were properly addressed by the other elements of the PSD program. As discussed further in the next section, one such element is the requirement for sources to conduct an "additional impacts analysis," which includes an

²⁰ See S. Rep. 95-127, at 12, reprinted at 3 LH at 1386, 1410 (describing the goal of protecting "air quality values" in "Federal lands—such as national parks and wilderness areas and international parks," and in the next paragraph and subsequent text using the term "air quality related values" to describe the same goal); *id.* at 35, 36 ("The bill charges the Federal land manager and the supervisor with a positive role to protect air quality values associated with the land areas under the jurisdiction of the [FLM] and then describing the statutory term as "air quality related values"). H.R. Report 95-564 at 532 (describing duty of Administrator to consider "air quality values" of the tribal and State lands in resolving an appeal of a tribal or State redesignation, which is described in the final bill as "air quality related values").

analysis of the impacts on visibility, soils, and vegetation of the proposed source and associated growth, regardless of the classification of the area impacted by the source. Note also that states have the option under the Act of designating additional areas as Class I areas and providing for AQRV review for these State Class I areas if they believe that there are areas within their borders that merit such protection.

The commenter is not correct in saying that the review to protect AQRVs does not apply to emissions increases from sources other than major stationary sources. While it is generally true that a major stationary source may trigger the analysis as part of the required PSD review for new major stationary sources and major modifications where such source's emissions increase may affect a Class I area, the review itself includes the impacts on an AQRV of other emissions in the area, including emissions from non-major sources. In addition, states may adopt requirements in their State implementation plans to require certain minor sources seeking a permit to undergo an AQRV analysis if they choose to do so.

We agree with the commenter that the AQRV review has certain limitations in that a State can, under some circumstances, issue a PSD permit over the objection of the FLM. Here again, Congress enabled this outcome when it provided that a permit would not be issued when the FLM demonstrates "to the satisfaction of the State" that the source will have an adverse impact on AQRVs in a Class I area. Section 165(d)(2)(C)(ii). We read this provision to reflect Congress's judgment on the appropriate balance between State and FLM discretion in the reach of AQRV review. That said, when a reviewing authority declines to follow a determination of adverse impact by the FLM, the reviewing authority is expected to provide a rational basis for doing so, and a reviewing authority's rejection of an FLM's finding may not be arbitrary and capricious. As stated by EPA's Environmental Appeals Board in *In the Matter of: Hudson Power 14—Buena Vista*, 4 E.A.D. 258, 1992 WL 345661 (October 5, 1992) (in Section II.A):

States do not have unfettered discretion to reject an FLM's adverse impact determination. If a State determines that an FLM has not satisfactorily demonstrated an adverse impact on AQRVs from the proposed facility, the State must provide a "rational basis" for such a conclusion. "given the FLM's affirmative responsibility and expertise regarding the Class I areas within their jurisdiction." 50 FR 28549, July 12, 1985. Arbitrary and capricious rejections of

adverse impact determinations are not sustainable. (citations omitted).

In sum, the commenter correctly enumerated some of the limitations of the AQRV review under the Act. However, such review is only one element of the full PSD program, which must be evaluated against the statutory requirements in their entirety. We continue to believe, as previously stated, that under an increment approach, FLM review for AQRV impacts is an additional measure that helps satisfy the factors in sections 166(c) and 160(2) of the Act (which require EPA's pollutant-specific PSD regulations to protect (1) air quality values, and (2) parks and other special areas, respectively) in balance with the other statutory factors. We add that the AQRV review requirements of the existing regulations mirror these requirements in the Act, which reflect Congress' judgment of how AQRV review should properly be used to promote the purposes of the program as set out in section 160 of the Act.

5. Additional Impacts Analysis

The "additional impacts analysis" requirements set forth in our part 51 and 52 PSD regulations also help fulfill the criteria and goals and purposes in sections 166(c) and 160. The additional impacts analysis involves a case-by-case review of potential harm to visibility, soils, and vegetation in Class II and III areas that could occur from the construction or modification of a PSD source.

Sections 51.166(o)(1) and 52.21(o)(1) of the PSD regulations require that a permit provide the following analysis:

An analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

This requirement was based on section 165(e)(3)(B) of the Act, which provides that EPA establish regulations that require "an analysis of the ambient air quality, climate and meteorology, terrain, soils and vegetation, and visibility at the site of the proposed major emitting facility and in the area potentially affected by emissions from such facility * * *."

As mentioned in the previous section, one commenter argued that the provisions for protection of Class I areas are of no help in fulfilling the goal set forth in section 160(2) of the Act to preserve and protect air quality in the countless "other areas of special

national or regional natural, recreational, scenic, or historic value" such as State and local parks, wildlife refuges, recreation areas, lakes and historic areas, none of which were originally defined by Congress as Class I areas.

We acknowledge that the special provisions for protecting Class I areas are not applicable for protecting areas that are not designated as "Class I." However, we believe that the "additional impacts analysis" provisions are especially helpful for satisfying the requirements of section 166(c) in Class II and Class III areas, including the types of areas described by the commenter, that are not Class I areas but are worthy of special protection beyond what might be provided by the NAAQS and increments. 40 CFR 51.166(o) and 52.21(o). These areas are not subject to the special AQRV review that applies only in Class I areas. While the additional impacts analysis is not as intensive a review as the AQRV analysis required in Class I areas, the requirement to consider impairments to visibility, soils, and vegetation through the additional impacts analysis contributes to satisfying the factors applicable under section 166(c) of the Act in all areas, including Class II and Class III areas.

6. Installation of BACT

The requirement that new sources and modified sources subject to PSD apply BACT is an additional measure that helps to satisfy the factors in sections 166(c), 160(1), and 160(2) of the Act. This requirement, based on section 165(a)(4) of the Act, is already included in EPA's PSD regulations for all pollutants generally and thus, in the 2007 NPRM we considered it to be a part of the regulatory framework for the Agency's pollutant-specific regulations for PM_{2.5}. 40 CFR 51.166(j) and 52.21(j). Our existing regulations define "best available control technology" as "an emission limitation * * * based on the maximum degree of reduction for each pollutant subject to regulation under the Act * * * which the Administrator, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source through application of production processes or available methods, systems, and techniques * * *." 40 CFR 51.166(b)(12) and 52.21(b)(12). This pollutant control technology requirement, in practice, has required significant reductions in the pollutant emissions increases from new and modified sources while also stimulating the on-going improvement of control

technology. The control of PM_{2.5} emissions through the application of BACT helps to protect air quality values, public health and welfare, and parks and other special areas.

E. Final PM_{2.5} Increments

Based on our evaluation of the effects of PM_{2.5} and a balancing of the criteria in section 166(c) of the Act (and the incorporated goals and purposes of the Act contained in section 101 and the statutory PSD program in section 160 of the Act), EPA has concluded that the "safe harbor" increments for PM_{2.5} (which satisfy section 166(d) of the Act) are sufficient to fulfill the criteria in section 166(c) when combined with the

other measures described earlier that we apply to PM_{2.5}. Since several of the eight factors applicable under section 166(c) are satisfied by adopting the framework and other measures described earlier, our development of these increments for PM_{2.5} was guided by the four remaining factors that may not be fully satisfied by the framework and other measures: (1) Protecting AQRVs; (2) protecting the public health and welfare from reasonably-anticipated adverse effects; (3) protecting the air quality in parks and special areas, and (4) insuring economic growth.¹¹ In accordance with the "contingent safe harbor" approach, to determine the specific characteristics of the proposed increments, we first

established safe harbor increments representing the level of effectiveness necessary to satisfy the "at least as effective as" requirement in section 166(d) of the Act and then conducted further analysis to determine if additional measures are necessary to fulfill the requirements of section 166(c).

1. Identification of Safe Harbor Increments

Using the percentage-of-NAAQS approach under proposed Option 1, as explained in section V.C.2 of this preamble, we derived the following safe harbor increments for PM_{2.5}:

Averaging period	NAAQS (µg/m ³)	increments (µg/m ³)		
		Class I	Class II	Class III
Annual	15	1	4	8
24-hour	35	2	9	18

The table shows PM_{2.5} NAAQS levels (primary and secondary NAAQS) at 15 µg/m³ for the annual averaging time and 35 µg/m³ for the 24-hour averaging time. See 40 CFR 50.7. From these NAAQS levels, we calculated the safe harbor increments based on the same percentages that were used by Congress to establish the original PM increments (measured as TSP) in section 163 of the Act, i.e., 6.6 percent of the NAAQS for Class I areas, 25 percent of the NAAQS for Class II areas, and 50 percent of the NAAQS for Class III areas. We have concluded that increments with these characteristics are sufficient to satisfy the requirement in section 166(d) that we adopt increments (or other PSD regulations) that are "at least as effective as" the increments established in section 163 of the Act. See *EDF v. EPA*, 898 F.2d at 188, 190.

Nine commenters supported proposed Option 1, either explicitly or implicitly supporting our method of calculating the safe harbor increments used to develop increments for PM_{2.5}. One of these commenters, while agreeing with the safe harbor increment approach under Option 1, disagreed with our analysis of the adequacy of the safe harbor increments, as discussed in other sections of this preamble. One commenter who opposed Option 1 (based on the belief that section 166(a) of the Act is not the appropriate basis for PM_{2.5} increments) nevertheless

supported the percentage-of-NAAQS approach for developing PM_{2.5} increments under the statutory authority at section 166(f).

A commenter who opposed our proposal to calculate increments using percentages of the NAAQS argued that this approach for setting the PM_{2.5} increments is not scientifically supported. This commenter indicated that basing the PM_{2.5} increments on the same percentage of the NAAQS that were used to set PM₁₀ increments based on the TSP NAAQS ignores the relationship between PM₁₀ and PM_{2.5} emissions, which may be much different than the relationship between TSP and PM₁₀ emissions. The commenter argued that, because the ratio of PM_{2.5} to PM₁₀ emissions is 0.8, it appears that using the percentages proposed by EPA would indirectly restrict PM₁₀/TSP emissions and air quality impacts to proportionally lower levels than the PM₁₀ increments in order to avoid exceeding the PM_{2.5} increments. The commenter conceded that using the 0.8 factor to set PM_{2.5} increments may seem too high, but asserted that using the safe harbor approach would set increments for PM_{2.5} that are too low.

We conclude that the commenter is mistaken in saying that the PM_{2.5} increments use the same percentage of the NAAQS that were used to set the PM₁₀ NAAQS. We adopted the PM₁₀ increments using the "equivalent

substitution" approach set forth under section 166(f) of the Act. Under that approach, rather than calculating the PM₁₀ increments as specific percentages of the PM₁₀ NAAQS (using the same percentages that Congress used for setting the statutory increments for PM and SO₂), EPA determined the levels of the PM₁₀ increments that could represent an equivalent amount of increment consumed, as if the TSP increments were still in effect. See 58 FR 31622, June 3, 1993, at 31626-31627. Nevertheless, the commenter is correct that, in cases where the ratio of PM_{2.5} to PM₁₀ emissions is 0.8 for an individual source, the source may have to reduce its PM₁₀ emissions more than would otherwise be necessary to meet the PM₁₀ increments in order to control its PM_{2.5} emissions sufficiently to meet the safe harbor PM_{2.5} increments.¹² This is because the safe harbor PM_{2.5} increments are less than 80 percent of the PM₁₀ increments. For example, the Class II 24-hour PM_{2.5} safe harbor increment (9 µg/m³) is only 30 percent of the corresponding PM₁₀ increment (30 µg/m³).

The underlying reason that the safe harbor PM_{2.5} increments are so much less than the PM₁₀ increments is that the PM_{2.5} NAAQS are much less than the PM₁₀ NAAQS.¹³ This is the result of the evolution in our knowledge about the health and welfare effects of PM, in particular the effects of the fine PM

¹¹ We have paraphrased these factors here and in other sections to facilitate the explanation of our reasoning. However, we recognize, as we did in our regulation for NO_x, that the statutory language is

broader than the shorthand we use here for convenience.

¹² Note that the PM₁₀ increment may still be more limiting in areas where much of that increment has already been consumed.

¹³ The 24-hour PM_{2.5} NAAQS (35 µg/m³) is about 23 percent of the 24-hour PM₁₀ NAAQS (150 µg/m³).

represented by $PM_{2.5}$. We believe that it is fitting for $PM_{2.5}$ increments to reflect our greater knowledge about $PM_{2.5}$ effects (as embodied in the NAAQS), rather than to simply maintain the control level required by the PM_{10} increments as suggested by the commenter. If this results in $PM_{2.5}$ increments that are more limiting than PM_{10} increments, we believe that this outcome is appropriate in light of our statutory requirement to prevent significant deterioration of air quality as it relates to $PM_{2.5}$.

2. Data Used by EPA for the Evaluation of the Safe Harbor Increments for $PM_{2.5}$

We evaluated whether measures other than the safe harbor increments are necessary by analyzing primarily the scientific and technical information on the health and welfare effects of $PM_{2.5}$ contained in the June 2005 OAQPS Staff Paper which accompanied the last full review of the PM NAAQS completed in 2006.¹⁴

Section 166(a) of the Act provides that EPA establish pollutant-specific PSD regulations, such as increments, after the establishment of a NAAQS for the applicable pollutants. The Act provides that EPA will promulgate new PSD regulations under section 166, including new increments if appropriate, within 2 years from the promulgation of any NAAQS after 1977. Within that time frame, the health and welfare information used for the setting of the NAAQS would also be "current" for purposes of establishing pollutant-specific PSD regulations. We believe this timing reflects congressional intent that EPA consider the same body of information concerning a pollutant's health and welfare effects when it promulgates the NAAQS and subsequent PSD increments (or other measures) defining significant air quality deterioration for the same pollutant. However, when we used that same information as the basis for our proposed pollutant-specific PSD regulations, we evaluated that information under the legal criteria in section 166 of the Act rather than the criteria in section 109 applicable to the promulgation of NAAQS. See *EDF v. EPA*, 898 F.2d at 190.

At the time of our proposal of $PM_{2.5}$ increments, we had just completed a review of the $PM_{2.5}$ NAAQS. Thus, the information used in the NAAQS review was current and timely for purposes of establishing pollutant-specific PSD regulations for $PM_{2.5}$. On October 17,

2006, based primarily on considerable new data on the air quality and human health effects for $PM_{2.5}$ directly, EPA revised the primary and secondary NAAQS to provide increased protection of public health and welfare by retaining the level of the annual standard and tightening the level of the 24-hour standard from 65 to 35 $\mu g/m^3$ while retaining the 24-hour PM_{10} NAAQS and revoking the annual PM_{10} NAAQS. The information contained in both the 2004 Criteria Document and 2005 Staff Paper that was used for the latest review of the PM NAAQS was also considered for the purpose of evaluating the $PM_{2.5}$ increments that we have established in this final rule.

The 2004 Criteria Document and 2005 Staff Paper are the products of a rigorous process that is followed to validate and interpret the available scientific and technical information, and provided the basis for recommending the $PM_{2.5}$ NAAQS. In accordance with the Act, the NAAQS process begins with the development of "air quality criteria" under section 108 for air pollutants that "may reasonably be anticipated to endanger public health or welfare" and that come from "numerous or diverse" sources. Section 108(a)(1). For each NAAQS review, the Administrator must appoint "an independent scientific review committee composed of seven members of the National Academy of Sciences, one physician, and one person representing State air pollution control agencies," known as the Clean Air Scientific Advisory Committee (CASAC). Section 109(d)(2)(A). The CASAC is charged with recommending revisions to the criteria document and NAAQS, and advising the Administrator on several issues, including areas in which additional knowledge is required to appraise the adequacy and basis of existing, new, or revised NAAQS. Section 109(d)(2)(B),(C).

"Air quality criteria" must reflect the latest scientific knowledge on "all identifiable effects on public health or welfare" that may result from a pollutant's presence in the ambient air. Section 108(a)(2). The scientific assessments constituting air quality criteria generally take the form of a "criteria document," a rigorous review of all pertinent scientific studies and related information. The EPA also develops a "staff paper" to "bridge the gap" between the scientific review and the judgments the Administrator must make to set standards. See *Natural Resources Defense Council v. EPA* ("NRDC"), 902 F.2d 962, 967 (D.C. Cir. 1990). Both documents undergo extensive scientific

peer review as well as public notice and comment. See, e.g., 62 FR 386542.

3. Scope of Effects Considered

The effects of ambient $PM_{2.5}$ concentrations may include effects from secondarily-formed $PM_{2.5}$. Thus, when we analyzed the data in this rulemaking, we evaluated the health and welfare effects of both direct $PM_{2.5}$ and secondarily-formed $PM_{2.5}$ that may result from the transformation of other pollutants such as SO_2 and NO_x . This was consistent with the approach we described for addressing these effects in the review of our pollutant-specific NO_2 increments regulations. 70 FR 59590.

4. Evaluation of the Health and Welfare Effects of $PM_{2.5}$

Airborne PM is not a specific chemical entity, but rather is a mixture of liquid and solid particles from different sources and of different sizes, compositions, and properties. Particle size distributions show that atmospheric particles exist in two classes: fine particles and coarse particles. The indicator for fine particles is $PM_{2.5}$, which represents that population of particles that is mostly less than 2.5 micrometers in size. The indicator for thoracic coarse particles is " $PM_{4-2.5}$," which represents particles sized between 2.5 and 10 micrometers. In the last two reviews of the PM NAAQS, EPA concluded that these two indicators, because of their different sources, composition, and formation processes, should be treated as separate subclasses of PM pollution for purposes of setting ambient air quality standards.

Fine PM is derived directly from combustion material that has volatilized and then condensed to form primary PM or from precursor gases, such as SO_2 and NO_x , reacting in the atmosphere to form secondary PM. Major components of fine particles are sulfates, strong acid, ammonium nitrate, organic compounds, trace elements (including metals), elemental carbon, and water. Primary and secondary fine particles have long lifetimes in the atmosphere (days to weeks) and travel long distances (hundreds to thousands of kilometers). They tend to be uniformly distributed over urban areas and larger regions, especially in the eastern United States. As a result, they are not easily traced back to their individual sources.

a. Health Effects

The EPA reported important progress since the last PM NAAQS review in advancing our understanding of potential mechanisms by which ambient $PM_{2.5}$, alone and in combination with other pollutants, is causally linked to a

¹⁴ The review completed in 2006 updated the previous review, which began in 1994 and resulted in revised standards for PM in 1997.

number of key health effects. The more extensive and stronger body of evidence used by EPA to study the health effects of PM_{2.5} in our latest review identified a broader range of effects than those previously documented, involving premature mortality and indices of morbidity (including respiratory hospital admissions and emergency room visits, school absences, work loss days, restricted activity days, effects on lung function and symptoms, morphological changes, and altered host defense mechanisms) associated with both long-term and short-term exposure to PM_{2.5}. A more detailed discussion of the health effects associated with PM_{2.5} is contained in the 2007 NPRM. 72 FR 54127–54128. In addition, an overview of the scientific and technical evidence considered in the 2004 Criteria Document and 2005 Staff Paper can be found in our proposed rule for revising the NAAQS for PM (71 FR 2619, January 17, 2006).

b. Welfare Effects

Ambient PM alone, and in combination with other pollutants, can have a variety of effects on public welfare. While visibility impairment is the most noticeable effect of fine particles present in the atmosphere, both fine and coarse particles can have other significant welfare-related effects, including effects on vegetation and ecosystems, materials (e.g., soiling and corrosion), and climate change processes.

In reaching our decision in 2006 to revise the suite of PM secondary standards, EPA factored in several key conclusions from the scientific and technical information contained in the 2004 Criteria Document and 2005 Staff Paper. These conclusions included the following: (1) PM-related visibility impairment is principally related to fine particle levels, and most directly related to instantaneous levels of visual air quality associated with short-term averaging periods; (2) PM_{2.5} concentrations can be used as a general surrogate for visibility impairment in urban areas; (3) any secondary NAAQS for visibility protection should be considered in conjunction with the regional haze program as a means of achieving appropriate levels of protection against PM-related visibility impairment in urban, non-urban, and Class I areas nationwide; (4) the available evidence is not sufficient to support distinct secondary standards for fine or coarse particles for any non-visibility related welfare effects; and (5) the secondary standards should be considered in conjunction with protection afforded by other programs

intended to address various aspects of air pollution effects on ecosystems and vegetation, such as the acid deposition program and other regional approaches to reducing pollutants linked to nitrate or acidic deposition.

In this rulemaking, EPA has reviewed the scientific and technical information concerning welfare related effects considered in the 2004 Criteria Document and 2005 Staff Paper to determine whether there is any basis for modifying the safe harbor increments developed for PM_{2.5} to satisfy the criteria under sections 166(c) and 160 of the Act. Our review included information on visibility impairment, and effects on vegetation and other ecosystem components, materials and soiling, and climate changes. A detailed discussion of the various welfare effects we considered for evaluating the safe harbor increments for PM_{2.5} is contained in the 2007 NPRM. 72 FR 54128–54133.

5. Fundamental Elements of Increments

As we have previously noted, under the model established in the Act and prior EPA regulations, the function of an increment is not like that of the NAAQS in that an increment is not intended to set a uniform ambient pollutant concentration “ceiling” across the United States. See 70 FR 59600. Instead, while both increments and NAAQS generally serve to limit ambient air pollution levels, increments are designed to allow a uniform amount of pollutant concentration increase for each area in the United States having a particular classification, i.e., Class I, II, or III. The amount of the allowable increase is measured against a baseline air quality level that is typically different for each particular area.¹⁵ Because the baseline air quality level varies from one location to another, and is not established for a particular area until a source proposing to construct in that area submits a complete PSD permit application, it is not possible to determine what the maximum ambient pollutant concentration attainable will be for a given area (to be used to determine the protection afforded by an increment against potential adverse environmental effects) until the specific baseline air quality level is known.

For the reasons described in our NO₂ increments rule, our objective is to establish uniform increments, consistent with the increments for SO₂ and PM originally established by Congress, that allow the same level of deterioration for

each area of the country having the same classification. 70 FR 59601. It is important to understand that increments are not intended to reduce ambient concentrations of an air pollutant below existing baseline levels in each area, but rather to define a level of allowable increase in pollutant concentrations above baseline levels, and to identify the level at which “significant” deterioration occurs for each area, in accordance with its specific classification. 70 FR 59600.

6. Evaluation of the Safe Harbor Increments

As indicated earlier (in section V.E.2 of this preamble), mindful of the considerations made about the fundamental characteristics of the increments, we reviewed the scientific and technical evidence available for the 2005 review of the NAAQS for PM in order to determine whether, and to what extent, the “safe harbor” increments might need to be modified in order to protect air quality values, health and welfare, and parks while insuring economic growth consistent with the preservation of clean air resources in accordance with sections 166(c) and 160 of the Act. As we did in our evaluation of the safe harbor NO₂ increments (70 FR 59603–59606), we relied on an approach that evaluates how protective the safe harbor PM_{2.5} increments are by comparing the marginal pollutant concentration increases allowed by the safe harbor increment levels against the pollutant concentrations at which various environmental responses occur.

We analyzed the available evidence from both a quantitative and qualitative perspective to reach a decision about whether we should modify the contingent safe harbor PM_{2.5} increments and whether we have sufficient information to select a specific alternative level, averaging time, or pollutant indicator for the increments. As a result of our analysis, we proposed to conclude that it was not necessary to modify the safe harbor increments to protect human health, address non-visibility welfare effects, or further protect visibility. This analysis is described in detail in the 2007 NPRM.

After considering the comments on our evaluation of the safe harbor increments and the conclusions we reached in the 2007 NPRM (summarized in the following paragraphs), we continue to believe that the safe harbor increments for PM_{2.5} (which satisfy section 166(d) of the Act) are sufficient to fulfill the criteria in section 166(c) of the Act (and the incorporated goals and purposes of the Act in section 101 and the PSD program in section 160) when

¹⁵ It should be noted, however, that an increment does not allow air pollution levels in an area to increase beyond the ambient concentration of a pollutant that would exceed the level allowed by the NAAQS.

combined with the other measures described earlier that we apply to PM_{2.5}. Consequently, this final rule establishes the PM_{2.5} increments at the level of the proposed safe harbor increments.

An environmental group submitted extensive comments arguing that the PM_{2.5} safe harbor increments are not sufficient to meet the Act's requirements for PSD and that our analysis was inadequate, and two other commenters submitted more narrowly targeted comments in this area. A summary of the major comments, along with our responses, follows. A more detailed treatment of the comments can be found in the Response to Comments document for this rulemaking, which is available in the rulemaking docket.¹⁶

The environmental group commenter stated that EPA has not complied with section 166(c) of the Act because the Agency has not made a finding or demonstrated that the PM_{2.5} PSD rules will (as required by section 160(2) of the Act) preserve, protect, and enhance the air quality in parks and special areas. The commenter asserted that EPA offered only vague assertions that the proposed increments would "satisfy" the statutory factors and that they, along with other programs, would "help" to fulfill the statutory purposes. The commenter went on to argue that EPA sought to excuse its failure to show fulfillment of the statutory purposes by asserting that it cannot develop a uniform, quantitative, dose-response relationship between fine particle levels and certain ecosystem impacts (citing 72 FR 54134), but that, even if true, such a claim does not excuse the agency from satisfying its statutory duty under section 166(c).

We conclude that the 2007 NPRM demonstrated that the safe harbor increments, in combination with the other aspects of the regulatory framework, fulfill the statutory requirements despite the scientific uncertainties. We reiterate that finding today. The fact that we did not, in the 2007 NPRM, explicitly state this as a finding does not diminish the demonstration made there and reiterated in this preamble.

The environmental group commenter believes that the relationship between PM_{2.5} and adverse effects can be quantified to a greater extent than stated by EPA. Regarding acid rain and other adverse ecological impacts, the commenter asserted that critical loads can be established as a way of quantifying and limiting the PM_{2.5} contribution to degradation, and noted

that critical loads are now used by authorities in Europe, have been endorsed by leading North American scientists, and have been used by Federal land management agencies. To comply with section 166(c), the commenter believes that EPA must establish a mechanism to supplement the nationally uniform increments with additional measures, including a requirement to establish area-specific critical loads or equally protective limits, where necessary to protect and enhance air quality in specific parks and natural areas.

With regard to the critical load concept, we agree conceptually with the commenter that critical loads could be used to supplement the existing increments, especially as a means of protecting the known sensitive ecosystems within Class I areas. While we disagree that the critical loads concept can be used as an effective replacement to increments for limiting air quality degradation, we believe that the concept offers considerable promise in helping to protect sensitive receptors in specific Class I areas. However, we do not believe that it would be appropriate at this time to establish a requirement for area-specific critical loads under the PSD program. In our 2005 PSD rule for NO₂ increments, we indicated that states could propose using information on critical loads as part of their approach for managing air quality in their individual SIP-approved PSD programs, but sufficient information was not yet available for EPA to incorporate the use of critical loads into the national PSD program. See 70 FR 59613.

The concept of critical loads is useful for estimating how much pollution a particular ecosystem can experience on a prolonged basis without showing adverse effects. In addition to addressing the opportunity for using critical loads under its NO₂ increment rule, EPA has addressed the concept of critical loads in the last review of the PM NAAQS and currently in the secondary NO₂/SO₂ NAAQS review.¹⁷ To date in the United States, critical loads have had their primary application in the area of atmospheric deposition of sulfur (S) and nitrogen (N). In the last review of the PM NAAQS, EPA found that ambient PM was contributing to the total load of pollutants entering the U.S. ecosystem

annually. However, the review also concluded that there were "insufficient data for the vast majority of U.S. ecosystems that differentiate the PM contribution to total N [nitrate] or S [sulfate] deposition to allow for practical application of this approach as a basis for developing national standards to protect sensitive U.S. ecosystems from adverse effects related to PM deposition." The 2005 Staff Paper for the PM NAAQS, in reaching this conclusion, addressed various important factors, including (1) the lack of a long-term, historic database of annual speciated PM deposition rates to establish relationships between PM deposition and ecosystem responses; (2) uncertainty in predicting the amount of PM deposited to sensitive receptors from measured concentrations of PM in the ambient air; and (3) the unique nature of each ecosystem and the current inability to extrapolate with confidence any effect from one ecosystem to another. The 2005 Staff Paper recommended that EPA give serious attention to the critical load concept and recommended the collection of data from a "greater variety of ecosystems over longer time scales to determine how ecosystems respond to different loading rates over time." 2005 Staff Paper at page 7-19.

The review of the secondary NAAQS for NO_x and sulfur oxides (SO_x), which is currently underway, is evaluating ecological effects due to the atmospheric deposition of NO_x and SO_x. The two main targeted effects are acidification and nutrient enrichment in both aquatic and terrestrial ecosystems. This review is attempting to use critical loads to evaluate the impact of current depositional loads and alternative loads in several case study areas. However, as mentioned earlier, the estimation of ecosystem critical loads expressed in terms of PM requires long-term ecosystem-level data on speciated PM deposition rates for which an adequate database is currently lacking for most sites in the United States.

The environmental group commenter also asserted that the safe harbor increments would allow PM_{2.5} air quality to deteriorate to the level of the NAAQS in many locations. According to the commenter's analysis, at 55 percent of the locations with PM_{2.5} monitors that were not already exceeding the PM_{2.5} NAAQS, 24-hour PM_{2.5} concentrations would be allowed to increase up to the level of the NAAQS. In addition, the analysis showed that for 84 percent of locations not already exceeding the NAAQS, the 24-hour PM_{2.5} concentrations would be allowed to increase to a level of 30 µg/

¹⁶ Docket No. EPA-HQ-OAR-2006-0605 can be accessed on line at <http://www.regulations.gov>.

¹⁷ In the 2005 OAQPS Staff Paper reviewing the NAAQS for PM, EPA cited the following accepted definition of "critical load": "quantitative estimate of an exposure to one or more pollutants below which significant harmful effects on specified sensitive elements of the environment do not occur according to present knowledge." See page 6-45.

m^3 or more. The commenter believes that allowing such levels would not be protective of public health, given that we stated in the 2007 NPRM that we had previously found that $\text{PM}_{2.5}$ concentrations less than a range of 30–35 $\mu\text{g}/\text{m}^3$ (24-hour average) were protective of public health (citing 72 FR 54128).

The environmental group commenter's analysis showed similar results for the proposed annual $\text{PM}_{2.5}$ increments. The commenter asserted that $\text{PM}_{2.5}$ concentrations would be allowed to increase up to the level of the annual NAAQS in 55 percent of the locations that are currently in attainment, and that 87 percent of these sites would be allowed $\text{PM}_{2.5}$ concentrations of 12 $\mu\text{g}/\text{m}^3$ or higher. Again, the commenter believes that allowing annual concentrations at or above 12 $\mu\text{g}/\text{m}^3$ would not be protective of public health, based on our statement in the 2007 NPRM that we had previously found that $\text{PM}_{2.5}$ concentrations less than a range of 12–15 $\mu\text{g}/\text{m}^3$ (annual average) were protective of public health (citing 72 FR 54128).

We do not believe that increments must be set at levels that ensure that the full amount of increment will be available in all locations. The statutory provisions in the PSD program have always been clear that a source must demonstrate that it will comply with both the NAAQS and increments for any pollutant. Consistent with congressional intent, the PSD program does not allow a source to violate the NAAQS just because its emissions will not cause the increments to be exceeded. If the increments were to be developed in such a way that all areas, taking into account current ambient air quality status, would be able to utilize the full amount of increment, then the increment levels would have to be unnecessarily stringent in areas that are substantially cleaner than levels allowed by the NAAQS.

Congress recognized that all areas of the country might not be able to utilize the full amount of increment when they provided provisions within the Act requiring that both the NAAQS and increments must continue to be met at all times. In areas where the full amount of increment is not available due to levels of pollution approaching the NAAQS, states may need to require emissions reductions at existing sources to accommodate the desired amount of economic growth. Hence, we do not believe it is reasonable to unduly restrict economic growth in cleaner areas by setting more restrictive increments to help maintain air quality

levels below the NAAQS in areas which are currently only marginally attainment.

In addition, we disagree with the commenter's assertion that the increments will not protect public health. In setting the $\text{PM}_{2.5}$ NAAQS at 35 $\mu\text{g}/\text{m}^3$ (24-hour) and 15 $\mu\text{g}/\text{m}^3$ (annual), EPA concluded that these levels protect public health with an adequate margin of safety. Regardless of the level at which the increments are set, no source is permitted to cause the NAAQS to be exceeded. That is, as noted previously, the upper bound on the permissible concentration of $\text{PM}_{2.5}$ is determined by the increment or the NAAQS, whichever is more restrictive in each particular case. Thus, the entire framework of the $\text{PM}_{2.5}$ regulations, including the safe harbor increments, is protective of public health. In asserting otherwise, the commenter has misconstrued our statements in this regard.

In the 2007 NPRM section on the health effects of $\text{PM}_{2.5}$ (72 FR 54127–54128), we discussed the fact that we considered setting the 24-hour NAAQS in the range of 30 to 35 $\mu\text{g}/\text{m}^3$ and the annual NAAQS in the range of 12 to 15 $\mu\text{g}/\text{m}^3$. However, we concluded in setting the NAAQS that 35 $\mu\text{g}/\text{m}^3$ (24-hour) and 15 $\mu\text{g}/\text{m}^3$ (annual) are protective of public health with an adequate margin of safety. We did not say, nor do we believe, that $\text{PM}_{2.5}$ concentrations must be below 30 $\mu\text{g}/\text{m}^3$ (24-hour average) or 12 $\mu\text{g}/\text{m}^3$ (annual average) to protect public health.

The environmental group commenter believes that there is a quantifiable relationship between visibility impairment and $\text{PM}_{2.5}$ levels, citing the 2007 NPRM discussion (72 FR 54135) as well as the most recent Criteria Document and Staff Paper for $\text{PM}_{2.5}$. The commenter pointed out that in the 2007 NPRM (72 FR 54135), EPA observed that the proposed Class II short-term safe harbor increment of 9 $\mu\text{g}/\text{m}^3$, if combined with the estimated daily background levels in most areas (*i.e.*, 10 $\mu\text{g}/\text{m}^3$), would be below the minimum values recommended in the 2005 Staff Paper for the secondary short-term standard for $\text{PM}_{2.5}$ (which was 20 $\mu\text{g}/\text{m}^3$). Rather than supporting the adequacy of 9 $\mu\text{g}/\text{m}^3$ as an increment level to protect visibility, the commenter believes that this shows that the safe harbor increment is inadequate because consumption of an increment of 9 $\mu\text{g}/\text{m}^3$ combined with background levels alone would cause an area to reach within 1 $\mu\text{g}/\text{m}^3$ of the staff-recommended value of 20 $\mu\text{g}/\text{m}^3$. The commenter added that most areas would have $\text{PM}_{2.5}$ pollution from motor

vehicles and stationary sources in concentrations substantially greater than background levels, easily placing these areas above 20 $\mu\text{g}/\text{m}^3$ (citing the 2005 Staff Paper at 2–77).

The environmental group commenter went on to assert that the safe harbor $\text{PM}_{2.5}$ increments will not be sufficient to protect visibility in parks and other natural areas. In the 2007 NPRM, we stated that a 24-hour average $\text{PM}_{2.5}$ concentration of 20 $\mu\text{g}/\text{m}^3$ correlates to a visual range of approximately 25 to 35 kilometers. 72 FR 54129. The commenter asserted that this visual range distance falls far short of what the National Park Service considers to be good visibility for national parks, adding that the National Park Service has stated that visibility used to be 90 miles (145 km) on average in eastern parks, and 140 miles (225 km), on average in western parks.¹⁰ The commenter stated that the safe harbor increments would allow parks and other natural areas to experience $\text{PM}_{2.5}$ pollution that is correlated with a 25–35 km visual range.

The visibility impairment issue is more complex than suggested by the environmental group commenter. In addition to predicting what the maximum ambient change in air quality is for a particular area, a visibility impairment assessment considers such things as the frequency, magnitude, and duration of visibility impacts in order to conclude that an adverse impact will occur.

In addition, the environmental group commenter misconstrued the illustration we included in the 2007 NPRM. We noted that the lowest level we considered as a secondary $\text{PM}_{2.5}$ NAAQS was 20 $\mu\text{g}/\text{m}^3$, which was considered to address visibility issues in urban areas. We also noted that in most areas, the estimated 98th percentile of daily background concentrations is less than 10 $\mu\text{g}/\text{m}^3$. In adding the Class II safe harbor increment (9 $\mu\text{g}/\text{m}^3$) to the 98th percentile of background levels, we were simply showing that even in the worst case, the combination of the safe harbor increment and background $\text{PM}_{2.5}$ would not exceed the most stringent level we considered for the secondary $\text{PM}_{2.5}$ NAAQS. The commenter presented this rough, worst-case calculation as if it represented the typical situation that would result from the safe harbor increments. In addition, the environmental group commenter's statements do not apply to parks and special areas that are classified as Class

¹⁰ The commenter cited http://www.nps.gov/shen/nature/visibility_and_haze.htm for historic visibility in national parks.

Class I areas because the safe harbor increments for such areas are much lower.

Another commenter stated that the proposed 24-hour Class I increment ($2 \mu\text{g}/\text{m}^3$) would not be protective of AQRVs, particularly visibility. This commenter noted that the National Park Service uses a 5 percent change in light extinction from estimated natural conditions as the threshold for "adverse impacts" to Class I visibility. The commenter indicated that depending on the constituents of the ambient $\text{PM}_{2.5}$ and the humidity, a concentration of $2 \mu\text{g}/\text{m}^3$ in a typical Class I area would result in a change in light extinction ranging from 13 to 80 percent in the Western United States and from 8 to 50 percent in the Eastern United States and, therefore, would likely constitute "adverse impacts" to Class I visibility. While acknowledging that the FLM may still determine that the visibility in the Class I area is adversely affected by an increase in concentration that is less than the increment, this commenter pointed out that we stated in the 2007 NPRM that "generally speaking an increment should not be so large that it routinely results in substantially more pollution in Class I areas than is generally acceptable under the AQRV approach" (citing 72 FR 54135). The commenter concluded that the proposed 24-hour $\text{PM}_{2.5}$ increment does not meet this test and recommended that EPA set a lower $\text{PM}_{2.5}$ 24-hour increment.

This commenter appears to have identified a worst-case scenario in terms of increment concentrations, and although we agree with the visibility impacts related to those concentrations discussed in the comment, we do not believe the proposed increment level compromises the protection of visibility or other AQRVs. Although the "AQRV test" uses 5 percent light extinction as a screening threshold, the determination of adverse impact is made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairment and how these factors correlate with visitation to the Class I area. The suggestion that the 5 percent threshold is routinely exceeded by PSD sources or that an absolute worst-case scenario is occurring to the geographic extent, intensity, duration, and frequency that would warrant an adverse impact determination is unsupported, especially considering the relatively few adverse impact determinations that have been made in the past. It is, however, important to note that the AQRV analysis is independent of the PSD increment analysis; whether or not the increment

is projected to be exceeded does not determine the need for an AQRV analysis. The determination that a facility does or does not cause an adverse impact on a Class I area is not solely contingent upon the PSD increment, so we do not believe that lowering the proposed increment is necessarily more protective of the AQRV.

With respect to these two commenters' concerns about visibility protection, we continue to believe that the increments cannot be expected to be the sole means of protecting various welfare concerns. In the 2007 NPRM, we stated that "visibility protection in Class I areas is more adequately provided by the AQRV process." Congress defined AQRVs to specifically include visibility and left it for the FLMs to define other special attributes of Class I areas that warranted special protection. We also noted that Congress has established several visibility programs that target emissions reductions to achieve desired visibility benefits. See 72 FR 54135. Collectively, these protective programs, along with the totality of the PSD program, offer an effective means of addressing unique local problems that cannot be addressed solely by uniform national increments.

However, the environmental group commenter asserted that these other programs will not fulfill the statutory purposes. As discussed previously in sections V.D.4 and 5, the commenter does not believe that FLM review in the AQRV process and the air quality impacts analysis required by section 165(a) of the Act are adequate. We disagree; see sections V.D.4 and 5 for more detail on the comments and our responses.

The environmental group commenter also noted that we cited the regional haze program as a justification for adopting less protective PSD rules (referring to 72 FR 54135), but the commenter pointed out that the haze program applies only to Class I areas and does not apply at all to the majority of the nation, which is Class II. The commenter further noted that we stated in the 2007 NPRM that "some State and local governments have also developed programs to improve visual air quality in specific urban areas" (citing 72 FR 54135), and pointed out that we gave no specific information on such programs, nor any information about the visibility protection that they provide beyond that provided by the proposed increments. The commenter asked that we identify the specific State and local programs, and that we specify how much visibility protection such programs are providing.

The commenter is correct that the regional haze program directly addresses only Class I areas. As we have discussed before, these are the areas that Congress defined as deserving of the most protection under PSD, including the visibility protection provisions in subpart 2 of title I, part C of the Act, which is the statutory basis for the regional haze program. While Class I areas are the target for the regional haze program, we believe that many areas of the nation will receive collateral visibility benefits from this program. As emissions of the pollutants that cause regional haze are reduced, many areas in the paths of transport will benefit. In addition, as discussed previously in section V.D.5 of this preamble, PSD applicants must prepare an analysis of "other impacts," including visibility impacts, in areas other than Class I areas.

Regarding State and local visibility programs, in the 2005 Staff Paper EPA described several existing programs to improve visual air quality in urban areas. These programs were located in Denver, CO; Phoenix, AZ; and Lake Tahoe, CA. Also, the states of California and Vermont have each established standards to protect visibility. See the 2005 Staff Paper, pages 6–17 through 6–23.

The environmental group commenter cited the 2007 NPRM (72 FR 54135) where we said that the use of "distinct PM increments for visibility protection is not the most effective means of addressing the visibility problem." The commenter believes that this claim is based on false premises, including the idea (discussed previously) that other programs effectively protect visibility nationwide, and the idea that the only option is a "distinct" PM increment for visibility protection. As to the latter, the commenter stated that EPA can strengthen the safe harbor increment to ensure visibility protection and need not adopt a separate "visibility" increment. In addition, the commenter asserted that EPA has ignored the statutory mandate that the PSD rules fulfill the statutory goals and purposes, and that we cannot shirk that statutory duty merely because we claim some other type of action would be "more effective."

We continue to believe that Class I area visibility protection under the PSD program is appropriately addressed via the AQRV process. As mentioned previously, Congress explicitly included "visibility" as an AQRV for which FLMs would have an affirmative responsibility to protect in Class I areas under their jurisdictions. Where the FLM successfully demonstrates that there

would be an adverse impact on the AQRV (e.g., visibility), a State cannot issue a PSD permit, even when the source's emissions do not violate the $PM_{2.5}$ increments. In addition, we continue to believe that the analysis of other impacts, including visibility, in non-Class I areas is the appropriate means of addressing visibility protection in these areas, as envisioned by Congress when it enacted the PSD provisions of the Act.

As a result, we do not believe it is necessary to create a distinct increment (e.g., with a different averaging period) or to lower the safe harbor increments to protect visibility in urban, non-urban, or Class I areas across the United States. We reach this conclusion in proper consideration of the other, more direct approaches being used to address visibility problems in the United States. The primary such approach, the regional haze program, is within the PSD framework for $PM_{2.5}$. Note that part C of title I of the Act, "Prevention of Significant Deterioration of Air Quality," includes subpart 2, which is the statutory basis for the regional haze program. Regarding our consideration of other State and local visibility protection measures that are outside the PSD framework, we do not believe it is reasonable to disregard these area-specific measures that focus on the preferences of individual communities where a uniform national increment for visibility protection generally cannot.

The environmental group commenter also stated that the proposed PSD rules fail to ensure fulfillment of the "enhancement goal" set out in the Act. The commenter noted that section 101(a) states as the Act's first purpose: "to protect and enhance the quality of the Nation's air resources," while section 160(2) states that the purpose of the PSD program is to "preserve, protect, and enhance" air quality in parks and other special areas. The commenter asserted that the proposed rule did not address these enhancement requirements or explain how the proposed increments would fulfill those requirements.

This same issue was raised in the 2005 PSD rule affirming the NO_2 increments. At that time we expressed our belief that the goal to enhance air quality in national parks and wilderness areas is implemented through the regional haze program while the PSD program focuses on preserving and protecting air quality in these areas. However, when a PSD increment violation is identified, we agree that EPA may require a State to revise its SIP to correct the violation. See 40 CFR 51.166(a)(3). Otherwise, we do not

interpret these PSD provisions to authorize us to direct states in their SIPs to achieve reductions in emissions from existing sources for PSD purposes.

We recognized at that time, and continue to believe, that the growth management goals of PSD may also be fulfilled when the states adopt controls on existing sources that would reduce emissions and allow growth from new sources and major modifications to existing sources without causing significant deterioration. Under the increment approach, we have interpreted the PSD rules to allow states to require reductions from existing sources in order to expand the allowable increments and, thereby, allow for more growth under the PSD program. However, we have never required states to do so because, in the absence of an increment violation, we do not believe section 166 and other provisions in part C of title I of the Act give us the legal authority to mandate such reductions for PSD purposes.

Another commenter stated that the $PM_{2.5}$ increments should be twice the recommended levels because scientific studies do not support the need for such low levels for protection of health and welfare. The commenter believes that increments at the proposed levels would jeopardize the goal of providing opportunities for economic growth. The commenter expressed concern over EPA's use of epidemiologic studies and questioned the ability of such studies to provide a reliable evaluation of health risks. The commenter claimed that epidemiologic studies are capable of finding association between a substance or exposure and a health effect but rarely capable of determining if there is causation, while toxicological studies using randomized trials are specifically designed to determine causation. The commenter added that other factors providing evidence for causation include dose-response relationships, consistency, and repeatability of studies, which the commenter said are not present in the studies cited by EPA. The commenter specifically referred to two studies, acknowledged by EPA to show no evidence of a dose-response relationship gradient between $PM_{2.5}$ and specific health related effects.

We disagree with the commenter's recommendation that the increments should be twice the proposed (and final) levels. The scientific studies to which the commenter referred pertain to studies that EPA used to determine the health-based NAAQS for $PM_{2.5}$, and we do not believe it is relevant to this rule to respond to comments related to the setting of the NAAQS. The NAAQS are designed to protect public health and

welfare; increments then are intended to insure that air quality in clean areas is not allowed to deteriorate significantly, and the PSD regulations insure that any such deterioration does not lead to air pollution levels that exceed the levels defined by the NAAQS.

As discussed previously, we are finalizing this rulemaking using the safe harbor approach under section 166(a) of the Act. Using this approach, we calculated the "safe harbor" increments as percentages of the NAAQS comparable to the percentages that Congress used to establish the original statutory increments for PM and SO_2 . These values represent the level of effectiveness necessary to satisfy section 166(d) of the Act, and could be tightened if necessary based on further analysis to determine if additional measures are necessary to fulfill the requirements of section 166(c) of the Act. Thus, under this approach and on this record, we do not conclude that it is appropriate to finalize increments at levels any less stringent than the safe harbor increments, as the commenter recommends.

7. Compliance Determinations for the $PM_{2.5}$ Increments

a. Modeling Compliance With $PM_{2.5}$ Increments

Section 163(a) of the Act provides that "In the case of any maximum allowable increase * * * for a pollutant based on concentrations permitted under the national ambient air quality standards for any period other than an annual period, such regulations shall permit such maximum allowable increase to be exceeded during one such period per year (emphasis added)." Accordingly, the existing PSD rules allow one exceedance per year of each short-term increment defined by the rules. See 40 CFR 51.166(c) and 52.21(c). With the addition of the $PM_{2.5}$ increments to the list of maximum allowable concentrations in the PSD rules, the existing provision allowing one exceedance per year applies equally to the 24-hour $PM_{2.5}$ increments as well. Thus, when modeling increment compliance, the highest value of the second-highest modeled increase in estimated $PM_{2.5}$ concentrations at each model receptor for the 24-hour averaging time should be less than or equal to the maximum allowable increase for $PM_{2.5}$. For the annual increments, the modeled annual averages should not exceed the annual maximum allowable increase for $PM_{2.5}$. See EPA's "Guideline on Air Quality Models" at 40 CFR part 51 appendix W, section 10.2.3.3.

We did not expressly state in the 2007 NPRM the implications of adding $PM_{2.5}$ increments to the existing list of increments in 40 CFR 51.166(c) and 52.21(c) of the PSD regulations. Nevertheless, it should have been clear at the time that, in the absence of alternative language for $PM_{2.5}$, the existing provision allowing one exceedance for the short-term increments would apply to the increments for $PM_{2.5}$ along with the increments already listed. We did not receive any comments either supporting or opposing these methods for determining compliance with the $PM_{2.5}$ increments.

We recognize that the above approach for determining compliance with the 24-hour $PM_{2.5}$ increments differs from the approach contained in guidance that we provided in a March 23, 2010 memo titled "Modeling Procedures for Demonstrating Compliance with $PM_{2.5}$ NAAQS," which sets forth a procedure designed to demonstrate compliance with a statistically based standard that is met when the 98th percentile 24-hour concentration is less than or equal to $35 \mu g/m^3$. A similar dichotomy exists for the 24-hour PM_{10} increments and NAAQS, where compliance with the 24-hour PM_{10} NAAQS is based on an expected exceedance form of the standard.

b. Condensable PM

Initially, the EPA will not require PSD applicants under the Federal PSD program to consider condensable PM in emissions calculations to determine whether a proposed project is subject to the PSD requirements. In addition, we will not require the condensable portion to be considered in the required $PM_{2.5}$ air quality analyses. In our May 2008 $PM_{2.5}$ NSR Implementation Rule, we announced that we would not require that states address condensable PM in establishing enforceable emissions limits for either PM_{10} or $PM_{2.5}$ in NSR permits until the completion of a transition period. Further, we indicated that the transition period would end January 1, 2011 unless EPA advanced the date through the rulemaking process. We also indicated that such rulemaking would involve the assessment and possible revision of test methods for measuring condensable emissions and taking comment on an earlier closing date for the transition period in the NSR program if we are on track to meet our expectations to complete the test methods rule much earlier than January 1, 2011.¹⁹ In

addition, states that have developed the necessary tools are not precluded from acting to include condensable PM emissions in NSR permit actions prior to the end of the transition period, especially if it is required in an applicable SIP. See 73 FR 28334–28336.

c. $PM_{2.5}$ Precursors

In the 2007 NPRM, we proposed to add SILs for $PM_{2.5}$ to the PSD regulations at 40 CFR 51.166 and 52.21. (The SILs are described more fully in section VI of this preamble.) Accompanying these SILs, we proposed to add a new paragraph to the regulations explaining that the requirements for a source impact analysis for $PM_{2.5}$ would be considered to be satisfied, without further air quality modeling, if it were to be shown that the increase in direct $PM_{2.5}$ emissions from the source or modification will cause air quality impacts less than the prescribed SILs for $PM_{2.5}$. The reasoning at the time was that state-of-the-art modeling would not be available to adequately account for secondary $PM_{2.5}$ impacts resulting from emissions of precursors of $PM_{2.5}$, e.g., SO_2 and NO_x . Nevertheless, the existing PSD rules currently define potential precursors of $PM_{2.5}$. Based on the proposed language, the required compliance demonstration for the $PM_{2.5}$ NAAQS and the $PM_{2.5}$ increments (when promulgated) would be limited by regulation to an analysis of direct $PM_{2.5}$ emissions, and would not include consideration of emissions of $PM_{2.5}$ precursors for comparing the modeled source impacts to the prescribed SILs for $PM_{2.5}$.

The impacts of $PM_{2.5}$ precursors on ambient concentrations of $PM_{2.5}$ cannot be determined from the dispersion models that EPA has currently approved for modeling individual PSD sources. Such models are not designed to consider chemical transformations that occur in the atmosphere after the precursor emissions have been released from the source. Consideration of these transformations is necessary to be able to add precursor impacts into the total modeled ambient $PM_{2.5}$ concentrations for comparison to the SILs for $PM_{2.5}$.

The technical tools needed to complete a comprehensive analysis of all emissions that contribute to ambient concentrations of $PM_{2.5}$ are only in the developmental stage; nevertheless, we

believe that it would be inappropriate to restrict the regulatory language in such a way that future regulatory amendments would be required to enable the inclusion of precursor impacts in the $PM_{2.5}$ analysis as the necessary technical tools become available. Estimating techniques are being developed that will be able to be applied to the $PM_{2.5}$ analysis in the near future, which could not be required if the regulatory language precluded them. We acknowledge the concerns that have been expressed by some commenters about the shortcomings of not considering the impacts of $PM_{2.5}$ precursors under the $PM_{2.5}$ air quality analyses. Accordingly, we believe that the new provision for applying the SILs for $PM_{2.5}$ to the required analyses for the NAAQS and increments should not be self-limiting by specifying the use of only direct $PM_{2.5}$ emissions. Instead, the new provision contained in this final rule provides that the test will be based on whether "the emissions increase * * * would cause * * * air quality impacts less than [the $PM_{2.5}$ SILs]." See new 40 CFR 51.166(k)(2) and 52.21(k)(2). We believe that it would be more effective to rely on interim policy and guidance as appropriate to help determine the best methods available to make the required assessment of source impacts on ambient $PM_{2.5}$ resulting from any emissions.

F. Final Action on Trigger and Baseline Dates for $PM_{2.5}$ Increments

In the 2007 NPRM, we proposed as part of Option 1 to require the implementation of the $PM_{2.5}$ increment system (annual and 24-hour increments) with new baseline areas, baseline dates, and trigger date. Specifically, we proposed that the major source baseline date and trigger date, both fixed dates, would be defined as the effective date of the final rule and would reflect a date 1 year from the date of promulgation, in accordance with section 166(b) of the Act. In contrast, under Option 2 (both 2A and 2B), we proposed to establish new baseline dates for the 24-hour $PM_{2.5}$ increments, but to retain the existing baseline areas and dates for the annual $PM_{2.5}$ increments because the annual increments would be equivalent substitutes for the existing annual PM_{10} increments.

In light of the then-current and expected trends in $PM_{2.5}$ concentrations, our judgment was that starting with new baseline dates on or after the effective date of this rule would make the PSD increments for $PM_{2.5}$ more protective. We proposed that any emissions reductions occurring prior to the effective date of this rule would lower

¹⁹ We proposed test methods for measuring PM_{10} and $PM_{2.5}$, including condensable PM emissions,

from stationary sources on March 25, 2009 (74 FR 12970). In the same notice, we sought comments on whether to end the NSR transition period for condensable PM earlier than January 1, 2011. We anticipate publication of a final rule announcing our decision on the NSR transition period in July 2010.

the baseline concentration rather than be used for expanding the $PM_{2.5}$ increment. If a retroactive baseline date were to apply, emissions reductions occurring prior to the effective date of this rule would serve to expand the available increments, enabling more new pollution than would otherwise be allowed to occur.

We also expressed our belief that starting with different baseline dates to implement increments for $PM_{2.5}$ would be appropriate because Option 1 treats $PM_{2.5}$ essentially as a "new" pollutant for purposes of PSD and section 166 of the Act. We continue to believe that establishing a new baseline also overcomes significant implementation concerns that would otherwise exist if the existing PM baseline were maintained. In particular, if we were to require sources and reviewing authorities to conduct $PM_{2.5}$ increment analyses based on the minor source baseline dates previously established years or even decades ago under the TSP or PM_{10} program, they would have to attempt to recreate the $PM_{2.5}$ emissions inventory as of the minor source baseline date in order to determine the baseline $PM_{2.5}$ concentration for the area. For early minor source baseline dates in particular (e.g., 1976 in some areas of the United States), establishing the emissions inventory for $PM_{2.5}$ would be extremely difficult, cumbersome, and potentially inaccurate because historic emissions inventories did not include $PM_{2.5}$ emissions. For all of these reasons, we proposed Option 1 as our preferred option and requested comment on this contingent safe harbor approach for annual and 24-hour $PM_{2.5}$ increments under Option 1.

Under Option 1, we proposed that the $PM_{2.5}$ increments would be subjected to a 1-year delay consistent with the procedures under section 166(b) of the Act, which provides in general that these rules "shall become effective one year after the date of promulgation." Alternatively, we sought comment on a 60-day delay as part of our proposal under Option 1. In the proposal we requested comment on the argument that, while the Act includes a 1-year implementation delay for new increments, the same provision calls for EPA to promulgate new increments within 2 years of the promulgation of the NAAQS. Given that these $PM_{2.5}$ increments are being promulgated more than 2 years after promulgation of the NAAQS, we expressed our belief that the overall congressional intent reflected in section 166 of the Act could possibly be met by setting the effective date of the $PM_{2.5}$ increments earlier than

the "one year after the date of promulgation" provided in section 166(b) of the Act.

Twelve commenters supported our proposal under Option 1 to establish new trigger and baseline dates for $PM_{2.5}$, regardless of the particular increment option that they otherwise supported. These commenters generally saw new dates as being the best approach because of various problems that would result from retaining existing trigger and baseline dates. Some commenters claimed that it would be technically difficult to try to reconstruct old inventories to determine the amount of $PM_{2.5}$ emitted by sources in the past.

One commenter stated that establishing $PM_{2.5}$ increment inventories using existing PM_{10} baseline dates would be "extremely difficult, cumbersome, and necessarily inaccurate and unreliable as historic emissions did not specify $PM_{2.5}$ emissions." A State/local agency commenter said that it would be "virtually impossible for States to calculate the $PM_{2.5}$ component of previously consumed PM_{10} increments because data on the fine and coarse fractions of source emissions are largely unavailable."

Yet another commenter claimed that "resurrecting $PM_{2.5}$ inventories based on the PM_{10} baseline dates would be insurmountable." Similar comments were echoed by several commenters who supported the use of legal authority set forth in section 166(f) ("equivalent substitution" approach) for developing the numerical values for the $PM_{2.5}$ increments. One of these commenters stated that he did not "believe the establishment of new baseline dates for $PM_{2.5}$ would abandon past cases of increment consumption for PM_{10} , because the 24-hour PM_{10} increments would still be in effect * * *."

One commenter suggested that "EPA establish the trigger date as of the date when it officially established the non-attainment and attainment areas for $PM_{2.5}$; that is, April 5, 2005." The commenter explained that this approach is consistent with the PSD regulations from their inception and partially mitigates EPA's delays in implementing the PSD program for $PM_{2.5}$. The commenter believes "that States should be required to use the baseline areas previously established for their PSD program, unless the process for redefining these areas strictly follow procedures in the PSD regulations and EPA policy." The commenter claimed, "this will minimize any inconsistent applications of the regulations for $PM_{2.5}$."

One commenter noted that our proposed $PM_{2.5}$ increments were very

low and "facilities may find themselves immediately out of compliance with the $PM_{2.5}$ increments upon promulgation of the rule, based on a January 1975 or 1977 baseline date."

One commenter indicated that the historic TSP/ PM_{10} baseline dates should be retained. This commenter favored the equivalent substitution approach under section 166(f) and, consistent with that approach, retention of the existing baseline dates.

Having considered all the comments, we believe that the most reasonable approach for addressing the relevant dates associated with the $PM_{2.5}$ increments is to start anew with the baseline date concept. As already mentioned, the commenters have identified difficulties that would occur if the $PM_{2.5}$ emissions inventory for increment analyses had to be created for an earlier period of time, and the existence of these difficulties supports the approach under Option 1 to establish new dates for implementing the $PM_{2.5}$ increments. Also, these new baseline dates for $PM_{2.5}$ increments will not undo the current protection provided by the existing increments for PM because we are not revoking the 24-hour or annual PM_{10} increments under this new rule. Accordingly, this final rule establishes independent $PM_{2.5}$ increments using a "trigger date" and "major source baseline date" that are separate from the dates defined for the PM_{10} increments. Consequently, new minor source baseline dates and the corresponding baseline areas will be used for the annual and 24-hour $PM_{2.5}$ increments, and will be established when a source applies for a PSD permit any time on or after the new trigger date for $PM_{2.5}$. (See also the discussion about changes to the definition of "baseline area" in section V.G of this preamble.)

The "major source baseline date" for $PM_{2.5}$ is being set as October 20, 2010—the date of publication of this final rule. The setting of this date differs from previous major source baseline dates which were set as the date of publication of the proposed rule, but is similar to the major source baseline date set for the other increments in that the date precedes the effective date for implementing the increments, and thereby requires that certain major source emissions increases that occur before the trigger date retroactively count toward the amount of increment consumed.

The "trigger date" is being set at October 20, 2011, which is 1 year after the date of promulgation of this final rule. We are using this approach to define the date on which the $PM_{2.5}$ increments become effective as 1 year

from the date of publication, consistent with the 1-year delay required under section 166(b) of the Act. This date for the "trigger date" separates the applicability date of the $PM_{2.5}$ increments from the effective date of this final rule in general, but also ensures that the "minor source baseline date" for $PM_{2.5}$ for any particular $PM_{2.5}$ attainment or unclassifiable area cannot be established until after the increments become effective in this final rule. The implementation of these dates as part of the $PM_{2.5}$ increment system is discussed in greater detail in section VIII of this preamble.

We recognize that some may still have a concern about our decision to set the major source baseline date as the date of publication of this final rule in light of the fact that the $PM_{2.5}$ NAAQS have been in place since 1997; however, we believe that the selection of possible earlier dates would require states to retroactively establish $PM_{2.5}$ emissions inventories for increment analyses during a period when sources were generally not required to conduct $PM_{2.5}$ air quality analyses. Hence, given the lack of information, and considering the technical difficulties in doing so, we do not believe that it would be appropriate to require states and sources to retroactively account for $PM_{2.5}$ increment consumption by setting the major source baseline date at an earlier date than the date we have selected.

G. Definition of "Baseline Area" for $PM_{2.5}$

No changes were proposed with respect to the definition of "baseline area" for $PM_{2.5}$ increments. One commenter, however, noted that fact in claiming that we did not adequately account for significant impacts of $PM_{2.5}$ for purposes of defining the "baseline area" for the $PM_{2.5}$ increments. Under the existing regulations, the establishment of a baseline area for any PSD increment results from the submittal of the first complete PSD application, and is based on both the location of the proposed source and the impact of the source's emissions on the area. In accordance with the definition, the attainment or unclassifiable area in which the proposed source would construct is always part of the baseline area in which the minor source baseline date is established and the increment analysis is conducted. In addition, the definition provides that any surrounding attainment or unclassifiable area in which the proposed source's impact is greater than $1 \mu\text{g}/\text{m}^3$, annual average, would also become part of the baseline area, assuming the area had not already been

established as a baseline area by a previous application for a PSD permit. See 40 CFR 51.166(b)(15) and 52.21(b)(15).

As explained in the preamble for the 1980 PSD regulations, EPA selected an impact of $1 \mu\text{g}/\text{m}^3$, annual average, for the definition of "baseline area" because that value was considered the level of significance for both SO_2 and PM when the definition was originally established.⁴⁰ There was no mandate at that time that a $1 \mu\text{g}/\text{m}^3$ impact be used to determine the baseline area for increments for other pollutants; however, the use of a $1 \mu\text{g}/\text{m}^3$ impact in the definition of "baseline area" was not changed when EPA developed increments for NO_2 in 1988 because EPA also defined "significant" for NO_2 using the same annual average concentration of $1 \mu\text{g}/\text{m}^3$. The EPA has determined, however, that "significant" for $PM_{2.5}$ ambient impacts should be considered to occur at a lower concentration than $1 \mu\text{g}/\text{m}^3$. Elsewhere in this preamble, we have indicated that the SIL for $PM_{2.5}$ in this final rule is $0.3 \mu\text{g}/\text{m}^3$, annual average. Consequently, although no change to the definition of "baseline area" was proposed in this rule, we believe it is necessary and appropriate to define in this final rule a level of significance of $0.3 \mu\text{g}/\text{m}^3$, annual average, for establishing a new baseline area for purposes of $PM_{2.5}$ increments. See revised 40 CFR 51.166(b)(15)(i) and 52.21(b)(15)(i).

Had we established the SIL at $1 \mu\text{g}/\text{m}^3$, annual average, as proposed under Option 1 for SILs, then the definition of "baseline area" would not need to be revised. However, the revised definition in this final rule is consistent with our decision to establish a SIL of $0.3 \mu\text{g}/\text{m}^3$, annual average, for $PM_{2.5}$. We consider this action to be a logical outgrowth of our decision to establish a SIL for $PM_{2.5}$ and the comment concerning the effect of that action on the definition of "baseline area." Thus, we believe that our failure to initially propose this change to the definition of "baseline area," based on the possibility of selecting Option 3 for defining the SIL for $PM_{2.5}$, does not warrant a reproposal.

H. No Final Action With Respect to the Proposed Revocation of PM_{10} Annual Increments

In the 2007 NPRM, we proposed to either revoke or replace the annual

increments (Class I, II, and III) for PM_{10} to conform to the earlier revocation of the annual $PM_{2.5}$ NAAQS. We proposed to revoke the annual increments, based on the same technical evidence that led us to revoke the annual PM_{10} NAAQS, if we decided to use Option 1 for adopting $PM_{2.5}$ increments, and discussed our authority and rationale for doing so. 72 FR 54136.

As an alternative, under Options 2A and 2B we proposed to replace the existing annual PM_{10} increments with equivalent substitute $PM_{2.5}$ increments using the authority under section 166(f) of the Act. After further analysis and consideration of the comments on this issue, we have decided not to take any final action on our proposal to revoke the existing increments for PM_{10} as part of this rulemaking. The effect of not taking final action with respect to the PM_{10} annual increments is to leave those increments in place and unchanged.

Three commenters agreed with EPA's proposal to "adopt the 24-hour and annual $PM_{2.5}$ increments and to revoke the annual PM_{10} increments." One commenter stated, "counting and tracking increment is confusing enough without adding the confusion of potentially overlapping PM standards." The commenter noted that the "cleanest approach is to establish a single new $PM_{2.5}$ increment and work from there." The commenter suggested that EPA first "develop a coarse fraction increment, once EPA establishes coarse PM NAAQS." The commenter added that the removal of the PM_{10} annual increment is supported by the removal of the "health based standard for annual PM_{10} ."

One of the commenters agreed, "it makes no sense for EPA's regulations to contain an annual increment for PM_{10} even though an annual PM_{10} NAAQS no longer exists." The commenter added, "EPA is without authority under Section 166(f) to retain the PM_{10} annual increment if it adopts a $PM_{2.5}$ annual increment." This commenter explained, "EPA is compelled by law to eliminate the PM_{10} annual increment."

We agree with this commenter that section 166(f) is a "substitution" approach, however, as we stated in our 2007 NPRM, we expressed some concern about using section 166(f) to substitute $PM_{2.5}$ increments for PM_{10} increments. In fact, some commenters challenged our authority under section 166(f) to replace the PM_{10} increments. In our response to the following comments, we address the legal issues that we believe prevent us from simply revoking the PM_{10} increments.

⁴⁰ A source will be considered to impact an area if it has an impact of $1 \mu\text{g}/\text{m}^3$ or more of SO_2 or PM on an annual basis. This figure has been selected because it corresponds to levels of significance used in previous Agency determinations for SO_2 and PM. 45 FR 52716.

One environmental commenter claimed, "the agency has no authority to repeal an existing PM_{10} increment without at the same time restoring the corresponding TSP increment." The commenter noted, "Congress established the TSP increments by statute and gave EPA no authority to revoke them," and "instead, Congress gave EPA only limited authority to substitute PM_{10} increments for TSP increments under the conditions specified in Section 166(f)." The commenter explained, "EPA cannot revoke the annual PM_{10} increments, either by 'replacing' them with $PM_{2.5}$ increments or otherwise, unless EPA at the same time restores the annual TSP increment." The commenter noted, "retention of the PM_{10} annual increment is also entirely compatible with the statutory purposes, notwithstanding EPA's revocation of the annual PM_{10} NAAQS." The commenter further noted the following examples/evidence that retention of the annual PM_{10} increments is important to achieving the goals of the Act's PSD provisions:

- "While EPA attributes the visibility impairing impacts of PM pollution primarily to elevated short term fine particle concentrations, EPA recognizes that PM_{10} plays a significant role in the other welfare related impacts of PM pollution." 72 FR 54136.

- "EPA also states that the most significant PM-related ecosystem-level effects result from long term cumulative deposition * * * that exceeds the natural buffering or storage capacity of the ecosystem and/or affects the nutrient status of the ecosystem." 72 FR 54131.

Five State/local agency commenters opposed the revocation of PM_{10} annual increments "until EPA makes a determination on a PM-coarse NAAQS" and/or "establishes equivalent increments for PM-coarse." One of these commenters added, "it is prudent to maintain the PM_{10} increments until EPA makes a determination on the health and environmental effects of the coarse fraction of PM." The commenter claimed that, "if EPA retains the annual PM_{10} increments" "then the determination of $PM_{2.5}$ increments can complement the continuation of PM_{10} increment determinations without any discontinuities or unwanted degradation concerns."

Another one of these commenters stated, "the basis for dismissing the annual PM_{10} NAAQS by the substitution of fine particle NAAQS to address certain health and welfare effects does not provide a basis for dismissing a PSD increment which is meant to stop significant degradation of air quality."

The commenter noted, "as refinements are made to estimation of fine particle emissions or in instances where these are deemed not to be a major component of particulate emissions, the PM_{10} annual increment could prevent long term deterioration of air quality associated with the coarse component."

One State/local agency commenter noted, "EPA also proposes to replace the PM_{10} annual increment with the corresponding $PM_{2.5}$ increment under the Section 166(f) options 2A and 2B as well, but does not provide a substantive basis for such an action." The commenter does "not see the tension noted by EPA between Sections 166(a) and (f) with respect to reaching a holistic solution if EPA views $PM_{2.5}$ as a new indicator of PM, as we believe it can." The commenter explained, "under this approach, if EPA determines that coarse particle levels are necessary to protect the public from certain exposures not addressed by $PM_{2.5}$, then it will be appropriate for EPA to define complementary increments for coarse particulates as another indicator of PM." The commenter also asserted that the 24-hour increments for $PM_{2.5}$ must be based on section 166(f) authority, but believes that the $PM_{2.5}$ increment need not replace the PM_{10} increment for this averaging period.

One commenter requested that EPA "keep the PM_{10} PSD program (especially the increments) in place until the full $PM_{2.5}$ program is adopted and in place."

One commenter "does not support revoking the annual PM_{10} increments," because the commenter feels that "there are too many uncertainties regarding $PM_{2.5}$." The commenter provided the following example: "The program has been dragging for years, analytical methods are not formulated, the NSR part of the implementation rule has not issued, condensables are not yet included, and the impact of precursors has not been definitively explored." The commenter explained that "under these conditions, nothing concerning PM_{10} should be revoked until the reasons for doing so are clearly understood and the overall impact on ensuring clean air and the public health and welfare have been fully explored." The commenter suggested, " PM_{10} increments and NAAQS should remain in effect until these issues have been resolved to the satisfaction of the Administrator." This commenter believed that Options 2A and 2B must be based entirely on section 166(f) of the Act, but that the presence of increments for both PM_{10} and $PM_{2.5}$ can be supported under this section because the two sets of increments complement each other. The commenter indicated that the problem

will be resolved when sufficient data are available to revoke the PM_{10} NAAQS and increments and/or PM_{10} is replaced by $PM_{10-2.5}$.

One State/local agency association commenter recommended that "EPA can and should continue both the 24-hour and annual average PM_{10} PSD increment program until $PM_{10-2.5}$ standards are promulgated." The commenter explained that "EPA has the discretion to accomplish this under CAA § 166(f)" and "at a minimum, the agency should continue the 24-hour PM_{10} increments in conjunction with the continuation of the 24-hour PM_{10} NAAQS."

As stated previously, in this rule we are taking no final action on our proposal to revoke the annual PM_{10} increments even though the annual PM_{10} NAAQS has been revoked. Based on comments and our own legal analysis of the PM_{10} increments, we have concluded that there is a strong legal basis for not revoking the annual increments at this time. The PM_{10} increments were promulgated on June 3, 1993 (58 FR 31622) as replacement increments for the then existing statutory increments for PM measured as TSP. The fact that EPA promulgated the PM_{10} increments as "equivalent" replacements for the TSP increments under the authority of section 166(f) of the Act is important in that EPA does not have authority to simply remove the TSP increments that were explicitly defined within the PSD program requirements in the Act. Accordingly, we believe that the annual TSP increments would be restored by default should we decide to revoke the annual PM_{10} increments as proposed. However, even if the original annual TSP increments were not restored, there is no basis for automatically revoking the annual PM_{10} increments simply because we have revoked the annual PM_{10} NAAQS, because annual increments are not contingent upon the existence of annual NAAQS. This is clear from the court's decision in the earlier NO_2 increment litigation stating that increments for a particular pollutant do not necessarily need to match the averaging periods that have been established for NAAQS for the same pollutant. *EDF v. EPA*, at 189-190 ("* * * the 'goals and purposes' of the PSD program, set forth in § 160, are not identical to the criteria on which the ambient standards are based.").

1. Other Comments on Increments

Ten commenters (including State/local agencies and industry commenters) supported section 166(f) of the Act as the basis for $PM_{2.5}$ increments. These commenters typically

voiced the belief that when Congress enacted section 166(f), it authorized EPA to update PM increments when another indicator was defined, and that section 166(f) allows EPA to continue to do so as long as these increments are of equal stringency to the prior increments. Some of these commenters believe that section 166(f) is the only legitimate approach under the Act, while others indicated simply that it is preferable to section 166(a). Some of the commenters believe that section 166(f) authority can be used to add PM_{2.5} increments to the existing PM₁₀ increments. Others believe that PM_{2.5} increments finalized under section 166(f) must fully replace the existing PM₁₀ increments, and recommended doing so.

For the reasons discussed previously in this preamble, EPA has decided to finalize the PM_{2.5} increments under the authority of section 166(a) of the Act. With respect to the potential creation of PM_{2.5} increments under section 166(f) (as discussed in the 2007 NPRM at 72 FR 54120–54121), we have not reached any final conclusion as to whether that approach is authorized by the statute, but believe that such an approach raises significant legal issues. Because the Agency is not relying on section 166(f) in this rulemaking, we do not address these issues in this preamble, though some additional discussion is included in the Response to Comments document for this rule.

One industry association that supported the Option 1 approach based on section 166(a) authority also acknowledged that EPA is authorized to use the Option 2 approach based on section 166(f) authority. An industry commenter indicated that 2007 NPRM's arguments regarding the alternative legal authorities under section 166(a) and (f) were not compelling; the commenter recommended setting the PM_{2.5} increments at the levels proposed as Option 2B because they would have the lowest economic impact.

As noted previously, we have decided to finalize Option 1 based on section 166(a) authority because we believe that provision provides the clearest statutory authority for purposes of developing increments based on PM_{2.5}. We would point out, however, that any conclusion as to which option would yield

increments that "have the lowest economic impact" must include a consideration of not only the levels of the increments but also the associated baseline dates that define when emissions changes must be considered to affect the amount of increment consumed. Under Options 2 and 3, the PM_{2.5} increments would be regarded as replacement increments for the PM₁₀ increments and, as such, would include amounts of increment (based upon the PM_{2.5} component) already consumed under the existing PM₁₀ increment system. Thus, portions of the substitute PM_{2.5} increments could have already been consumed by previous PSD sources that emit PM. If, in fact, a portion of the PM_{2.5} increments had already been consumed by the prior PM₁₀ increment consumption process, then there would be a basis to conclude that less additional economic growth would be allowed under a set of replacement PM_{2.5} increments as compared to PM₁₀ increments based on separate, independent baseline dates.

One industry commenter suggested that EPA develop geographic area-specific increments (and SILs and SMCs) that take local conditions into account. The commenter pointed out that PM_{2.5} levels in PSD areas proximate to international borders may be elevated by sources outside the legal and practical control of the United States and State authorities. The commenter also noted that PM_{2.5} levels may be elevated by natural conditions, such as drought, fires, geologic formations (sandy or fine-grained surface features), high winds, etc., leading to excessively dusty ambient conditions over which the local area has no control. The commenter indicated that local area baselines must reflect these PM emissions, though they are not reflected in the local area's emissions inventory. The commenter urged EPA not to penalize such PSD areas by imposing uniform national PSD increments (or SILs or SMCs) where the conditions of concern are not capable of control.

As previously discussed, this final rule establishes an area classification system with prescribed, uniform PM_{2.5} increments for each class. We do not believe that it is necessary to develop different increments (or SILs or SMC)

for different areas of the country.

Emissions from natural conditions such as those described by the commenter would not consume increment due to their natural and temporary nature. In addition, if a State wishes to disregard new emissions from sources outside the United States, the State's PSD program may provide that such emissions do not consume increment (see 40 CFR 51.166(f)(1)(iv)).

VI. Final Action on PM_{2.5} SILs

A. EPA's Determination on SILs for PM_{2.5}

It is EPA's longstanding policy to allow the use of the SILs as *de minimis* thresholds under the NSR programs at 40 CFR 51.165(b) and part 51, Appendix S, to determine whether the predicted ambient impact resulting from the emissions increase at a proposed major new stationary source or modification is considered to cause or contribute to a violation of the NAAQS. We have also allowed the SILs under the PSD program to determine: (1) When a proposed source's ambient impacts warrant a comprehensive (cumulative) source impact analysis; (2) the size of the impact area within which the air quality analysis is completed, and (3) whether the emissions increase from a proposed new major stationary source or major modification is considered to cause or contribute to a violation of any NAAQS.

We proposed three separate options for setting SILs for PM_{2.5}. The first option relied upon the same approach we proposed for PM₁₀ in the 1996 NSR Reform proposal. This set included Class I SILs set at 4 percent of the Class I PM_{2.5} increments. For class II and III areas, we proposed to codify the SIL values that already existed for PM₁₀, i.e., 1.0 µg/m³ (annual) and 5.0 µg/m³ (24-hour). Options 2 and 3 relied on scaling the PM₁₀ SILs, as codified in 40 CFR 51.165(b), by a particular ratio. Specifically, for Option 2, the multiplier was the emissions ratio of PM_{2.5} to PM₁₀ for point sources in the 1999 NEI; for Option 3 the multiplier was the ratio of the PM_{2.5} NAAQS to the PM₁₀ NAAQS. The resulting SILs were proposed as follows:

Option		Proposed SILs (µg/m ³)					
		Class I		Class II		Class III	
		Annual	24-hr	Annual	24-hr	Annual	24-hr
1	...	0.04	0.08	1.0	5.0	1.0	5.0
2	...	0.16	0.24	0.8	4.0	0.8	4.0
3	...	0.06	0.07	0.3	1.2	0.3	1.2

We have decided to finalize the PM_{2.5} SILs proposed under Option 3. As explained earlier, these values will be used in the Federal PSD preconstruction review process consistent with our proposal. See 72 FR 54138–41 and 54143.

States are not required to adopt SILs in their NSR or PSD programs; the analyses for PM_{2.5} required by each applicable regulation can be carried out without using a SIL.²¹ Therefore, we do not intend for any specific deadlines to apply under the regulations at 40 CFR 51.165(b), 51.166, or part 51, Appendix S for states to submit SILs for PM_{2.5}, should they choose to do so, as part of their revisions to incorporate the final rules for PM_{2.5} into SIPs. Nonetheless, we believe that the availability of SILs as a screening tool greatly improves PSD program implementation by streamlining the permit process and reducing labor hours necessary to submit and review a complete permit application where the projected impact of the proposed source is *de minimis* in the relevant area. For these reasons, we are including the PM_{2.5} SILs in the Federal PSD regulations at 40 CFR 52.21 to screen proposed projects concerning the need for a cumulative source impact analysis for PM_{2.5}.

B. Response to Comments Concerning the SILs

The primary purpose of the SILs is to identify a level of ambient impact that is sufficiently low relative to the NAAQS or increments that such impact can be considered trivial or *de minimis*. Hence, the EPA considers a source whose individual impact falls below a SIL to have a *de minimis* impact on air quality concentrations that already exist. Accordingly, a source that demonstrates that the projected ambient impact of its proposed emissions increase does not exceed the SIL for that pollutant at a location where a NAAQS or increment violation occurs is not considered to cause or contribute to that violation. In the same way, a source with a proposed emissions increase of a particular pollutant that will have a significant impact at some locations is not required to model at distances beyond the point where the impact of its proposed emissions is below the SILs for that pollutant. When a proposed

source's impact by itself is not considered to be "significant," EPA has long maintained that any further effort on the part of the applicant to complete a cumulative source impact analysis involving other source impacts would only yield information of trivial or no value with respect to the required evaluation of the proposed source or modification.

While some commenters opposed all of the proposed options for PM_{2.5} SILs, most commenters generally supported the use of a SIL as a screening tool for PM_{2.5} air quality analyses. Commenters who supported one of the proposed options for the SILs were divided as to their support of a particular approach for selecting the SIL value, with each option receiving some support. Commenters also tended to agree that the SILs should not be used for determining significant impacts on AQRVs in Class I areas.

Those commenters supporting the concept of the SILs, yet opposing all proposed options, believed that all options yielded SILs that were too low. Another commenter, an environmental group, presented extensive legal and policy arguments against the SILs concept in general. Some of the significant comments and our responses to them are addressed herein, while others are covered in the Response to Comments document which we have placed in the docket for this rulemaking.

1. Legal Basis for SILs

One commenter opposed all three proposed options on both legal and policy grounds claiming that EPA has no legal authority to promulgate SILs and that the *de minimis* doctrine endorsed by the court does not apply to increment analyses, where Congress has expressly directed that the letter of the law applies in all circumstances, as it has in this case. (The commenter's policy concerns about SILs are discussed later in this section of this preamble.) The commenter stated that "Congress codified increments in section 163 of the Act, directing that SIPs contain measures assuring that the increments shall not be exceeded." According to the commenter, "The Act plainly provides that no major source may be constructed unless it meets this requirement, and may not contribute to an exceedance 'for any pollutant in any area.'" The commenter further stated that "the *de minimis* doctrine is inapplicable because it applies only where the regulations will yield a gain that is demonstrably trivial or zero."

We disagree with this commenter's claim that there is no legal basis for SILs. As stated in the 2007 NPRM, the

concept of a SIL is grounded on the *de minimis* principles described by the court in *Alabama Power* at 323, 360. In this case reviewing EPA's 1978 PSD regulations, the court recognized that "there is likely a basis for an implication of *de minimis* authority to provide exemption when the burdens of regulation yield a gain of trivial or no value." *Alabama Power* at 360. See the 2007 NPRM for more on how we have applied the *de minimis* principle in the past. See also, *Sur Contra La Contaminacion v. EPA*, 202 F.3d 443, 448–49 (1st Cir. 2000) (upholding EPA's use of SILs to allow permit applicant to avoid full impact analysis.)

2. Levels of the SILs

Several commenters opposed all three proposed options on the grounds that all yielded levels of SILs that are too low. One of these commenters argued that the proposed SILs "imply a level of monitoring and modeling sophistication that is currently absent in our regulatory scheme." This commenter recommended that EPA "rethink the level of the proposed SILs and select concentrations less likely to be within the level of error inherent in current monitoring and modeling methods."

We disagree with those commenters' concerns about all the proposed SILs being too low. While we did not select the Option 1 levels, the Class II and III SILs for PM_{2.5} under that option were the same ambient concentration levels that are used for the SILs for the other criteria pollutants under 40 CFR 51.165(b), and those existing SILs values are associated with NAAQS that are considerably higher than the NAAQS for PM_{2.5}. Clearly, it would have been inappropriate to select Class II and III SILs for PM_{2.5} that represent relatively higher values than the existing SIL values for other pollutants in light of the more stringent NAAQS levels that exist for PM_{2.5}. We also disagree that the SILs should be consistent with current monitoring capabilities for PM_{2.5}. The SILs are a screening tool used in comparison with modeled predictions—not monitored concentrations—of PM_{2.5}. Monitoring accuracy is not a relevant concern in predicting with air quality dispersion models the concentrations of a pollutant that a source will cause if its construction and operation are allowed to occur.

Two commenters expressed concern about national *de minimis* values. One stated that "the idea that a single national number can define 'trivial' is flawed, given that even very small impact can be of great significance in an area that is close to an increment or NAAQS." The other commenter

²¹ We note that, under the 2007 NPRM, we proposed that the SILs for PM_{2.5} would not be treated as a minimum program element for State PSD programs; however, the proposed regulatory language at 40 CFR 51.166(k)(2) incorrectly stated the "the plan shall provide that," which would indicate that the use of the SILs for PM_{2.5} was required in the State plan. This final rule corrects this error.

recommended that EPA "develop geographic area-specific * * * levels that take local conditions into account." This commenter reasoned that some PSD areas "should not be 'penalized' by a single, national PSD increment, significant impact levels and significant monitoring level, where the conditions of concern are not capable of control."

With regard to the first of these commenters, our longstanding policy has been that when a source has a *de minimis* impact on an existing air quality problem, that source should not necessarily be required to bear the burden of addressing its small contribution to a problem caused primarily by other sources. However, notwithstanding the existence of a SIL, permitting authorities should determine when it may be appropriate to conclude that even a *de minimis* impact will "cause or contribute" to an air quality problem and to seek remedial action from the proposed new source or modification.

We do not agree with the second of these comments concerning the development of regional SILs based on a concern that some amounts of PM_{2.5} in a particular area are "not capable of control." The PM_{2.5} SILs define a threshold level for determining whether a predicted ambient impact by a proposed major stationary source or major modification of PM_{2.5} needs to undergo a more thorough analysis of the PM_{2.5} NAAQS or increments. This value is not directly affected by the total amounts of PM_{2.5} that may exist in an area or by what causes the existing PM_{2.5} concentrations, rather by the impact of a single source relative to the levels of the NAAQS and increments that must be protected. Therefore, we do not see why the SILs should be influenced by the geographic area of concern, or how different levels of SILs for the same pollutant and averaging period would be necessary.

With regard to the commenters that supported at least one of the proposed SILs options, they generally did not prefer the entire suite of SILs (Class I, II, and III SILs) from a single option, but instead supported parts of different options, primarily divided by drawing a distinction between the Class I SILs and the SILs for Class II and III areas. Consistent with the way that commenters addressed the Class I, II, and III SILs, we will address the comments separately herein as well.

i. Class I SILs

Support and opposition for the proposed PM_{2.5} SILs for Class I areas was fairly evenly divided. The PM_{2.5} SILs for Class I areas proposed under

Option 2 received the support of some commenters, but also received an equal amount of opposition. Option 1, which yielded the lowest (most restrictive) values for the Class I area SILs for PM_{2.5} (annual and 24-hour averages), was supported by some commenters, including a Federal agency that serves as a FLM for Federal Class I areas under the PSD program, but was equally opposed. Finally, comments supporting the Class I SILs proposed under Option 3 (from which we derived the values included in the final rules) were matched by comments that opposed the Class I SILs under Option 3.

One commenter opposing the Option 3 SILs for Class I areas said that the values "appear to be unrealistically low and, if selected, would point to the need for EPA to conduct an economic impact analysis." We disagree that adopting the Option 3 SILs for Class I areas (and Class II and III areas) will result in economic impacts significant enough to warrant an economic impact analysis. Under the Paperwork Reduction Act, EPA is required to analyze, and receive approval from the Office of Management and Budget (OMB) for, the recordkeeping and reporting burden imposed by its regulations (referred to as the "Information Collection Request" or "ICR" for the regulation). For the PSD program, this includes the burden associated with the entire permitting process, including any required modeling analyses. In our analysis for this rulemaking, we have concluded that the number of PSD permits issued annually will be unchanged (at an estimated 274 per year), while the total burden across all PSD permit applicants of adding PM_{2.5} analyses will increase by a total of approximately 29,000 hours per year at a cost of approximately \$2.8 million per year. This total annual impact on industry is a small fraction of the threshold (\$100 million per year) that is considered "significant" under Executive Order 12866 (Regulatory Planning and Review) and the Unfunded Mandates Reform Act. See sections X.B and X.D of this preamble for more on the Paperwork Reduction Act and the Unfunded Mandates Reform Act, respectively. Our analysis of the recordkeeping and reporting burden of this rulemaking can be found in the docket for this ICR.²²

Another commenter stated that the use of a NAAQS-based ratio under Option 3 for the proposed SILs does not "translate back to the emissions point

level when comparing PM₁₀ and PM_{2.5}." This commenter continued, "this is an invalid method of proceeding because EPA has not shown that there is a correlation between the NAAQS and direct PM_{2.5} since there is no accounting for precursors and EPA does not have a quantifiable sense of the portion of PM_{2.5} that is condensable for various industries."

We disagree with the commenter's concern that the use of NAAQS-based ratios is an invalid method for developing the PM_{2.5} SILs. The purpose of using the NAAQS ratio with the PM₁₀ SILs to develop PM_{2.5} SILs is to establish values that have a comparable relationship between ambient concentrations of PM₁₀ and PM_{2.5} and their respective NAAQS levels. Whether a particular ambient concentration of PM_{2.5} results from direct PM_{2.5} emissions or from precursor emissions is not relevant to this particular approach. The PM_{2.5} SILs in this final rule are intended to be compared to the ambient concentrations of PM_{2.5} that are predicted by modeling the emissions of a proposed new project. Ambient concentrations of PM_{2.5} can be the result of direct PM_{2.5} emissions, which may include condensable particulate matter, as well as precursor emissions, e.g., SO₂ and NO_x.

We note that the 2007 NPRM included proposed regulatory language providing that demonstrations of whether the air quality impact of a major new source or modification would be less than the PM_{2.5} SILs be based on direct PM_{2.5} emissions from the proposed project. The intent of this was to recognize the technical limitations associated with modeling precursor emissions to predict ambient PM_{2.5} impacts. However, in this final rule we have removed that limitation by removing the reference to "direct" PM_{2.5} emissions.

One commenter, who did not support any of the proposed SILs options, was especially critical of the Class I SILs for PM_{2.5} under Option 1, stating that multiplying the proposed PM_{2.5} increment by 4 percent is without legal or practical merit. The commenter stated that just because "4 percent may have been a reasonable multiplier to use in establishing a significant emission rate threshold does not mean that the multiplier should be used for a completely different regulatory purpose." The commenter added that if the PM_{2.5} SILs for Class I areas under Option 1 were codified, emissions from even the most well-controlled coal-fired electric generating station located as far away as 300 km from a Class I area could well exceed the threshold.

²² See "Information Collection Request (ICR) for the Prevention of Significant Deterioration for PM_{2.5} Increments, Significant Impact Levels and Significant Monitoring Concentration," Docket No. EPA-EQ-OAR-2009-0620.

In contrast, the Federal agency commenter supporting the $PM_{2.5}$ SILs for Class I areas under Option 1 explained that they analyzed the effectiveness of the three sets of proposed SILs by modeling four different coal-fired power plant scenarios using an EPA-approved long-range transport model. The modeled plants included a large 1,500 megawatt (MW) facility, a moderate-sized 500 MW facility, and two medium 800 MW facilities. Based on this modeling analysis, the commenter concluded that the proposed levels of the Class I 24-hour SILs based on Option 1 and Option 3 are "more appropriately protective of the proposed Class I $PM_{2.5}$ increment and impacts to visibility than the level obtained under Option 2." This commenter supported the consistency of using 4 percent of the Class I increments that was used by EPA in proposing Class I SILs for SO_2 , NO_X , and PM_{10} in 1996.

We chose the Class I SILs under Option 3 because we believe that this option yields the most appropriate combination of SILs for all area classifications. Whether a particular source will have a significant impact on an area is determined to some extent by the amount of its emissions, but also by other factors such as the height of release, pollutant transport distance, terrain features, and meteorological factors. Thus, we did not select SILs values to address a certain size source or the degree of control of that source, but the ambient impact of that source relative to the NAAQS and increments that will result from the source's emissions. While the annual Class I SIL under Option 3 represents a level that is somewhat greater than 4 percent of the $PM_{2.5}$ annual increment for Class I areas, it is sufficiently close (as derived from a ratio of the $PM_{2.5}$ NAAQS to the PM_{10} NAAQS) so as to provide a reasonable threshold for defining *de minimis* for purposes of conducting a Class I increment analysis. We had proposed the use of 4 percent of the existing Class I increments to develop SILs for pollutants in the 1996 NSR Reform proposal; however, that particular component of the proposal was never finalized. See 61 FR 38250 beginning at 38291. We will further discuss our rationale for selecting the SILs under Option 3 in the discussion which follows for the Class II and III SILs.

b. Class II and III SILs

While many commenters tended to favor Option 2 with regard to the proposed Class I increments, they tended clearly to support Option 1 for

defining Class II and III SILs for $PM_{2.5}$. These particular SILs for $PM_{2.5}$ were proposed so as to be equal to the existing Class II and III SILs for the existing pollutants. In all, six commenters supported Option 1. One of these commenters stated that Option 1 SILs for Class II and III areas are "sufficiently stringent and fully consistent with the *de minimis* justification for SILs." The commenter added that "when conducting an air quality impact analysis * * * most applicants assume all coarse PM_{10} to be $PM_{2.5}$." The commenter claimed that this assumption is conservative and "overestimates the amount of fine particles being emitted and renders the effective SIL thresholds for $PM_{2.5}$ lower than those written into the regulations."

We strongly disagree that the SILs proposed under Option 1 as applied to $PM_{2.5}$ are sufficiently stringent. The application of such values as SILs for $PM_{2.5}$ would result in ambient concentrations of $PM_{2.5}$ that consume a much larger portion of both the $PM_{2.5}$ NAAQS and increments than either of the other two options proposed for $PM_{2.5}$ in light of the correspondingly more stringent levels of the $PM_{2.5}$ NAAQS and increments than those for the other pollutants. We believe that of the 3 options proposed, the $PM_{2.5}$ SILs based on Option 3 represent values that are more closely aligned percentage-wise with the SILs that have been or are being used for other forms of PM when compared to their respective NAAQS and increments.

We also disagree with the commenter's suggestion that the development of the SILs for $PM_{2.5}$, or any other pollutant, should in any way be influenced by the possibility that some sources may use conservative techniques for estimating a source's emissions rate. Such conservative techniques may be needed to the extent that technical issues associated with the determination of $PM_{2.5}$ emissions are identified, and can certainly be used at any time as a simplified methodology for estimating $PM_{2.5}$ emissions. But when such an overly conservative approach fails to yield *de minimis* results, the source may find it necessary to rely upon more accurate techniques for determining the amount of $PM_{2.5}$ that the source will emit.

Finally, one commenter, objecting to all of the proposed SILs, stated that EPA must assure that SILs are truly *de minimis* and must also include limitations on the use of SILs as necessary to prevent air quality from significantly deteriorating. We acknowledge that we did not conduct any new modeling or other types of

analyses of the proposed SILs in order to explicitly show that the final $PM_{2.5}$ SILs values in this final rule are *de minimis*. Instead, we have relied on past actions regarding the setting of *de minimis* levels to illustrate that the $PM_{2.5}$ values selected via Option 3 represent values that are as stringent as the previous levels that have been established to define *de minimis* for PM_{10} and TSP. See 45 FR 52706-708 (using modeling and representative data).

Using the 24-hour and annual NAAQS ratios of $PM_{2.5}$ to PM_{10} , and multiplying them by the corresponding existing PM_{10} SILs, we conclude that the $PM_{2.5}$ SILs define *de minimis* for the $PM_{2.5}$ NAAQS in the same way as the PM_{10} SILs do for PM_{10} NAAQS. Using the increments as a basis for comparison provides further support for our conclusion. The annual and 24-hour $PM_{2.5}$ SILs represent about 7.5 and 13 percent of the annual and 24-hour $PM_{2.5}$ increments, respectively. By comparison, the annual and 24-hour PM_{10} SILs represent about 5 and 17 percent of the annual and 24-hour PM_{10} increments, respectively. We believe the $PM_{2.5}$ SILs fall into a comparable relative range with the PM_{10} SILs and can be considered *de minimis*.

In EPA's 1980 final rule for PSD, EPA adopted SERs for the pollutants then subject to regulation under the PSD requirements. The SER adopted for PM (then measured as TSP) was 25 tpy, which represented an emissions rate for which EPA modeled impacts that represented about 4 percent of the TSP 24-hour NAAQS and about 28 percent of the 24-hour TSP increment. Thus, EPA considered it acceptable under the *de minimis* assessment for PM that a source of particulate matter capable of consuming around 28 percent of the applicable 24-hour TSP increment could be exempted from the requirements to complete a comprehensive source impact analysis for the PM NAAQS and increments. 45 FR 52708.

In looking at the amount of increment that could be consumed by a source that is ultimately exempted from having to complete a comprehensive modeling analysis, it should be pointed out that the maximum modeled concentration typically occurs in a relatively limited area, as compared to the entire modeling domain. In particular, for the short-term averaging periods, such as the 24-hour averaging period, modeled concentrations across the modeled area generally show that ground level impacts are reduced significantly from the peak value as the pollutant travels a relatively short distance from the source, so that the peak modeled

concentrations represent the source's impact at only a relatively few receptors within the modeled area. In addition, it is important to note that the temporal and spatial conditions which lead to a maximum impact by one source are seldom the same for other sources, such that maximum impacts of individual sources do not typically occur at the same location or at the same time.

Thus, in an area where several sources can demonstrate that their modeled impacts are *de minimis*, it generally should not be assumed that their individual maximum (albeit *de minimis*) impacts on the increment are additive. For example, four sources with *de minimis* PM_{2.5} impacts, each consuming 12 percent of the 24-hour PM_{2.5} increment, would not necessarily consume 48% of the 24-hour increment. Increment consumption is determined by the cumulative impact of source emissions on each individual receptor or modeling point in the area of impact within the baseline area defined for the affected PSD sources.

The preamble for the 1980 final rule for PSD included a description of a modeling analysis that EPA conducted to illustrate that a number of major sources each making a *de minimis* emissions increase for SO₂ could locate in an area (in that case, the Dayton area) and not cause a violation of either the applicable SO₂ increment or NAAQS. In that particular case, the modeling indicated that the maximum aggregate increment consumption for 37 sources emitting 40 tpy of SO₂ (the *de minimis* emissions rate for SO₂) would have a cumulative impact at any location of less than 1.5 µg/m³ on a 24-hour basis—well below the NAAQS and increments for SO₂. 45 FR 52708.

With regard to the commenter's recommendation that we place limitations on the use of SILs, we earlier provided an example of when it might be appropriate to require a modified source to mitigate its contribution to a violation of a NAAQS or increment even when the predicted ambient impact of the proposed emissions increase would result in what is normally considered to be *de minimis*. In addition, we have historically cautioned states that the use of a SIL may not be appropriate when a substantial portion of any NAAQS or increment is known to be consumed. We have indicated elsewhere in this preamble that states are not required to adopt the SILs for PM_{2.5} in this final rule. At their discretion they may choose not to rely on SILs to screen applicants or they may establish more stringent values.

Finally, it should be noted that while a source having only *de minimis*

impacts may not be required to complete a comprehensive source impact analysis, the emissions from such sources are still considered to consume increment and would be counted as part of the next increment analysis required to be completed by a PSD applicant in that same area, or by the State under a periodic increment review.

3. Relationship Between SILs and AQRVs

While commenters generally supported EPA's position that the SILs should not be used in any way to determine effects of emissions increases on the AQRVs in a Class I area, two commenters urged that the *de minimis* concentration be used for analyzing Class I area impacts under certain circumstances. That is, they believed that the SILs should be used to determine the need for a Class I area air quality analysis when an FLM has not identified a specific AQRV related to the pollutant under evaluation or obtained ambient monitoring data to confirm that predicted concentrations from air dispersion models are representative of actual AQRV impacts in the Class I area. The commenters claimed that without this flexibility, applicants would be required to conduct complex and extensive Class I air dispersion modeling without any clear objective, and regulatory agencies would have to review the modeling with limited information to determine if the emissions could cause an "adverse" impact or if potentially costly controls should be required.

These commenters appear to be suggesting that an FLM may needlessly call for an analysis of a particular Class I area, involving "complex and extensive Class I area dispersion modeling" despite the fact that no AQRV has been identified for that Class I area. We agree that a Class I analysis in the absence of any known AQRVs would be unnecessary because any demonstration of an adverse impact must be made with respect to a pollutant adversely affecting an AQRV. We believe, however, that such analyses would be avoided under the procedures set forth in section 165(d)(2)(C) of the Act which require that a notice be filed alleging that a proposed source may cause or contribute to adverse effects, and identifying the adverse impact. Insofar as the FLM must also demonstrate "to the satisfaction of the State that emissions from such facility will have an adverse impact on the air quality related values," it would be difficult to require the source to undertake any kind of detailed analysis in the absence of an

AQRV on which such adverse impacts must be demonstrated. Thus, we have concluded that it is not necessary to use the SILs as a safeguard against unnecessary Class I area analyses. Instead, we believe that the need for a Class I analysis, other than the required analysis of the NAAQS and Class I increments (for both of which the SILs are intended to be used), should be based on the potential for adverse effects on an AQRV that the FLM has identified and believes could be affected by a pollutant that would be emitted by the proposed project.

4. Form of the SILs

One commenter stated that "the Proposal does not indicate how the proposed PM_{2.5} SILs are to be interpreted." This commenter believed that "the form of the SILs should be consistent with the form of the PM_{2.5} NAAQS" adding that "the current PM_{2.5} NAAQS requires that compliance with the 24-hour and annual standards be determined using 3-year averaging." Specifically, "The annual standard is calculated based upon the 3-year average of annual mean PM_{2.5} concentrations, and the 24-hour standard is based on the 3-year average of the 98th percentile (or highest-8th high value) of 24-hour concentrations."

In a March 23, 2010 EPA memorandum titled "Modeling Procedures for Demonstrating Compliance with PM_{2.5} NAAQS," we provided guidance for using the SILs in conjunction with the 24-hour and annual PM_{2.5} NAAQS, which takes into account the statistical form of the NAAQS. Following promulgation of the PM_{2.5} increments in this final rule, we intend to provide guidance for interpreting the SILs for their use with the 24-hour and annual PM_{2.5} increments as well.

5. SILs for Other Pollutants

In proposing Option 1, we noted that many who commented on the 1996 NSR Reform proposal supported this approach and believed that the proposed PM₁₀ SIL values would serve as appropriate *de minimis* values. In fact, we are aware that many states have been using these proposed SILs for PM₁₀ as screening tools since 1996 or earlier.

Regarding the proposed Class I SILs under Option 1, we expressed our belief that where a proposed source consumes less than 4 percent of the Class I increment, the source's impact is sufficiently low so as not to warrant requiring the source to carry out a detailed analysis of the combined effects of the proposed source and all other increment-consuming emissions in the

area. 72 FR 54140. We previously used a similar rationale to establish the SERs for PSD applicability purposes, concluding in part that emissions rates that resulted in ambient impacts less than 4 percent of the 24-hour standards for PM and SO₂ were sufficiently small so as to be considered *de minimis*. 45 FR 52707-8.

The original SIL values of 1.0 and 5.0 µg/m³ for TSP and PM₁₀ were interpreted by EPA as representing the minimum amount of ambient impact that is significant. This formed the basis for the proposed Option 1 PM_{2.5} SIL values of 1.0 and 5.0 µg/m³ for the annual and 24-hour averaging periods for Class II and III areas.

The SILs currently appear in EPA's regulations at 40 CFR 51.165(b). That particular NSR regulation provides that states must include a preconstruction review permit program for any new major stationary source or major modification that proposes to locate in an attainment or unclassifiable area and would cause or contribute to a violation of the NAAQS. These values, added to 40 CFR 51.165(b) on July 1, 1987, have previously been referred to as "significant ambient impact concentrations" and are used to enable a source to determine whether its emissions would cause or contribute to a NAAQS violation at "any locality that does not or would not meet the applicable national standard." 52 FR 24672, April 2, 1985, at 24688.

In 1985, when EPA proposed to add "significant ambient impact levels" for PM₁₀, we also indicated that for PSD purposes the requirements under section 51.165(b)²³ "would be applied to all applicable PSD requirements." The EPA has since applied these values in other analogous circumstances under the PSD program. Based on EPA interpretations and guidance, SILs have also been widely used in the PSD program as a screening tool for determining when a new major source or major modification that wishes to locate in an attainment or unclassifiable area must conduct a more extensive air quality analysis to demonstrate that it will not cause or contribute to a violation of the NAAQS or PSD increment in the attainment or unclassifiable area. The SILs are also used to define the extent of the Significant Impact Area where, using air dispersion models and ambient monitoring data, a cumulative source impact analysis accounting for

emissions changes from affected sources is performed.²⁴ See the 2007 NPRM for additional information on the history of EPA's guidance related to SILs (72 FR 54138-39).

In the 1996 NSR Reform proposal, we proposed to add the SILs for PM₁₀ and other pollutants already contained in 40 CFR 51.165(b)(2) directly into the PSD regulations at 40 CFR 51.166 and 52.21. Because the SILs in 40 CFR 51.165(b) did not include thresholds for Class I areas, we proposed to set Class I SILs at the level of 4 percent of the respective Class I increments. Thus, for PM₁₀, the proposed Class I SILs were 0.2 µg/m³ (annual) and 0.3 µg/m³ (24-hour), and the proposed Class II and III SILs were 1.0 µg/m³ (annual) and 5.0 µg/m³ (24-hour). The EPA has not yet taken final action on the 1996 proposal on SILs for pollutants other than PM_{2.5}; therefore, we rely upon our longstanding policy to use those values, as codified in 40 CFR 51.165(b)(2), for PSD permitting.

VII. Final Action on the PM_{2.5} SMC

A. EPA's Determination on the PM_{2.5} SMC

As with the increments and SILs for PM_{2.5}, we proposed three different options for establishing an SMC for PM_{2.5}. The first option, referred to as the "lowest detectable concentration" approach, relied on the method we used in 1980 to develop the SMCs for the pollutants then subject to PSD. This particular method focused on development of the SMC value based on the current capability of providing a meaningful measure of the pollutants. See relevant discussion later in this section and at 45 FR 52710. Options 2 and 3, called the "PM_{2.5} to PM₁₀ emissions ratio" and the "PM_{2.5} to PM₁₀ NAAQS ratio," respectively, used the SMC for PM₁₀ as the base for multiplying the emissions and NAAQS ratios to derive an SMC for PM_{2.5}. See 72 FR 54141. The three proposed options yielded the following numerical levels for the SMC:

- Option 1: 10 µg/m³ (24-hour average);
- Option 2: 8.0 µg/m³ (24-hour average); and
- Option 3: 2.3 µg/m³ (24-hour average).

We are taking final action on the SMC for PM_{2.5} using the "lowest detectable concentration" approach (Option 1). However, we have determined that the

SMC value that is calculated under this methodology is lower than the proposed value of 10 µg/m³ to reflect "current capability" with respect to the measurement and collection of ambient PM_{2.5} concentrations. The result of such revised calculation is that the SMC value in this final rule is different from (more stringent than) the proposed level. The revised value is 4 µg/m³ (24-hour average). Our basis for the revised calculation and the resulting lower value is described in greater detail later in this section.

The EPA and its delegated reviewing authorities will use the PM_{2.5} SMC to determine when it may be appropriate to exempt a proposed new major stationary source or major modification from the ambient monitoring data requirements under the PSD rules. Similarly, states with EPA-approved PSD programs that adopt the SMC for PM_{2.5} may use the SMC, once it is part of an approved SIP, to determine when it may be appropriate to exempt a particular major stationary source or major modification from the monitoring requirements under their State PSD programs (see 40 CFR 51.166(i)(5)).

B. Response to Comments Concerning the SMC

1. Legal Issues

Under the Act and EPA regulations, an applicant for a PSD permit is required to gather preconstruction monitoring data in certain circumstances. Section 165(a)(7) of the Act calls for "such monitoring as may be necessary to determine the effect which emissions from any such facility may have, or is having, on air quality in any areas which may be affected by emissions from such source." In addition, section 165(e) of the Act requires an analysis of the air quality in areas affected by a proposed major facility or major modification and calls for gathering 1 year of monitoring data unless the reviewing authority determines that a complete and adequate analysis may be accomplished in a shorter period. These requirements are codified in EPA's PSD regulations at 40 CFR 51.166(m) and 52.21(m).

In 1980, EPA adopted regulations that included pollutant-specific SMCs as a screening tool for sources to determine whether they should conduct site-specific preconstruction ambient monitoring.²⁵ We explained our

²³ In 1985, the requirements now contained in 40 CFR 51.165(b) were contained in 40 CFR 51.18(k), which was later part of a major restructuring of the part 51 SIP requirements.

²⁴ In the case of a NAAQS compliance analysis, all sources in the area are considered to contribute to the air quality levels; for increments, however, "all" refers only to those sources whose emissions, in whole or in part, consume PSD increment for a particular pollutant.

²⁵ The provision for the monitoring exemption was originally promulgated at 40 CFR 51.24(i)(8) and 52.21(i)(8); it should be noted, however, that this provision is now found at 40 CFR 51.166(i)(5) and 52.21(i)(5).

position that it was appropriate to exempt sources from preconstruction monitoring requirements for a pollutant if the source could demonstrate that its ambient air impact was less than a value known as the Significant Monitoring Concentration or SMC. At the time the SMCs were adopted, EPA described them as "air quality concentration *de minimis* level[s] for each pollutant [that were available] for the purpose of providing a possible exemption from monitoring requirements." 45 FR 52676, 52707 (August 7, 1980). The EPA explained that it believed there was "little to be gained from preconstruction monitoring" where a source could show that its projected impact of a pollutant within the affected area was below the *de minimis* concentration for that pollutant. 45 FR at 52710.

One commenter opposed our proposed establishment of any SMC for $PM_{2.5}$, claiming that SMCs in general are contrary to the Act. The commenter stated that "in Section 165(e) Congress mandated a full year of continuous air quality monitoring for each major source subject to the PSD program." With this in mind, the commenter indicated that there are no exceptions, other than the limited statutory provisions, discussed above, which allow for less than a year's worth of monitoring based on a determination that a complete and adequate analysis of such purposes may be accomplished in a shorter period. The commenter then argued that "the allowance for a 'shorter period' hardly amounts to authority to waive monitoring entirely, which is what EPA's SMC proposal would do."

As with the SMCs adopted by EPA in 1980, the SMCs that we proposed for $PM_{2.5}$ are supported by the *de minimis* doctrine set forth in the *Alabama Power* opinion. Like the other pollutants for which EPA has promulgated SMCs, EPA believes there is little to be gained from preconstruction monitoring of $PM_{2.5}$ concentrations that cannot be accurately measured.

Therefore, in developing the three proposed options for an SMC, EPA sought to use methods that would identify levels representing a *de minimis* or insignificant impact on $PM_{2.5}$ ambient air quality that makes the collection of additional monitoring data extraneous.

2. Level of the SMC

As indicated earlier, the SMC for $PM_{2.5}$ in this final rule is $4 \mu\text{g}/\text{m}^3$, 24-hour average. This value may be used by permitting authorities to determine when they may exempt a proposed major stationary source or major modification for $PM_{2.5}$ from the air

quality monitoring requirements for $PM_{2.5}$ under 40 CFR 51.166. The EPA and its delegated State/local programs will also use this new value under the Federal PSD program at 40 CFR 52.21.

We proposed three options for developing the SMC for $PM_{2.5}$; each option yielded a different concentration value. In choosing between the three options, EPA proposed to select the option that reflected the degree of ambient impact on $PM_{2.5}$ concentrations that could be considered truly *de minimis* and used to justify exempting a source from the requirement to gather 1 year of ambient monitoring data for $PM_{2.5}$. Ultimately, we have selected the "lowest detectable concentration" approach (Option 1) that relies directly upon ambient monitoring measurement sensitivity and precision. That is, if either the predicted source impact or estimated existing air quality in an area is below a concentration that can be accurately measured, then it would not be reasonable to require a source to attempt to collect such ambient data.

In 1980, EPA determined the SMCs based on the then current capability of providing a meaningful measure of ambient pollutant concentrations. The EPA promulgated values that represented five times the lowest detectable concentration in ambient air that could be measured by the instruments available for monitoring the pollutants. 45 FR 52710. The factor of "five" took into account the measurement errors associated with the monitoring of these low pollutant levels or small incremental changes in concentration. These measurement errors were said to arise from various sources, such as sample collection, analytical measurement, calibration, and interferences. See May 20, 1980 EPA memorandum from Rehm, K. A., to Warren Peters, contained in the docket for this rulemaking. Accordingly, in the 2007 NPRM for $PM_{2.5}$, we voiced our belief that this was a reasonable approach, since it was also used for PM_{10} and TSP. 72 FR 54141.

Eight commenters expressed support for the SMC based on Option 1, albeit at the higher level as originally proposed. In some cases, it is not clear whether these commenters supported the particular approach (i.e., an SMC linked to the lowest detectable level) or the fact that the calculated value was simply the highest value of the values proposed under the three options. Clearly, some of the commenters indicated their support for the approach because it is consistent with the approach used for setting the original SMCs in 1980. Two commenters opposed Option 1 because it resulted in

an SMC value that was too high. These latter commenters noted that the SMC derived via Option 1 ($10 \mu\text{g}/\text{m}^3$, 24-hour average) was greater than the proposed 24-hour $PM_{2.5}$ increment for Class II areas and argued that such an outcome is inappropriate. We believe that this important concern is adequately addressed by the level of the SMC for $PM_{2.5}$ that is established in this rulemaking.

Several commenters supported the levels derived from either Option 2 or Option 3, but were concerned that the justification for choosing either of these values would need to be further explained. Some of these commenters were specifically concerned about the use of a 0.8 $PM_{2.5}$ -to- PM_{10} emissions ratio which, they argued, relied on inventory data that did not adequately address all sources that would likely affect ambient concentrations of $PM_{2.5}$ in an area.

We conclude that Option 1 is the appropriate option for defining the SMC for $PM_{2.5}$. The ability to accurately measure ambient $PM_{2.5}$ concentrations is not related to a ratio of $PM_{2.5}$ to PM_{10} either directly in terms of emissions or as expressed by the respective NAAQS, which were used to define the SMC for $PM_{2.5}$ under Options 2 and 3, respectively. Our original concern was that, while Option 1 linked the SMC directly to the concept of a minimum detectable concentration (in order to identify *de minimis* monitoring circumstances), the value originally derived from that approach in the 2007 NPRM was high in relationship to the concentrations of $PM_{2.5}$ defined by the existing NAAQS and increments for $PM_{2.5}$.

In considering the use of Option 1 for developing the SMC in the final rule, however, we recognized after publication of the proposed rule that it was necessary to re-examine the assumptions that we relied upon in 1980 to develop the numerical values for the original SMCs so that we could most accurately reflect current monitoring techniques for $PM_{2.5}$. Our re-examination for this final rule utilized the most current information concerning the physical capabilities of the $PM_{2.5}$ Federal Reference Method Samplers, and addresses uncertainties introduced to the measurement of $PM_{2.5}$ due to variability in the mechanical performance of the $PM_{2.5}$ samplers and the micro-gravimetric analytical balances that weigh filter samples.

The minimum detection limit (MDL) of $2 \mu\text{g}/\text{m}^3$, originally used in 1980 for the SMC for PM and promulgated for $PM_{2.5}$ in 1997 (see 40 CFR part 50, Appendix L, section 3.1), has been

reaffirmed by 9 years of field blank data collected by EPA through the PM_{2.5} Performance Evaluation Program. However, we found that new data exist to "indicate a conservative estimate of the aggregate uncertainty factor is no greater than '2' at the concentration equal to the MDL of 2 µg/m³."²⁴ Accordingly, the lowering of the uncertainty factor from "five" to "two" under Option 1 yields an SMC of 4 µg/m³ PM_{2.5}, 24-hour average, rather than the proposed concentration of 10 µg/m³.

We conclude that the modified level of 4 µg/m³ PM_{2.5}, 24-hour average, for the SMC under Option 1, based upon a more current understanding of monitoring precision for PM, especially fine PM, addresses commenter support for the use of a method that is consistent with the way other SMCs were developed and most directly reflects monitoring capability for the pollutant of concern, while at the same time responding to the concern of other commenters that a value in the lower range of proposed SMC values is most reasonable considering the levels of the NAAQS and increments for PM_{2.5}.

C. Correction of Cross Reference in PSD Ambient Monitoring Requirements

In the 2007 NPRM, we proposed to take final action to correct a cross reference contained in paragraph (i) of the part 51 and 52 PSD regulations. Specifically, at the time of the proposal, paragraphs (ii) and (iii) in 40 CFR 51.166(i)(5), and paragraph (ii) in 40 CFR 52.21(i)(5), each referred to concentrations listed in paragraph (i)(8)(i) of both regulations. However, there is no paragraph (i)(8)(i) in existing 40 CFR 51.166, and no concentration values are contained in existing section (i)(8)(i) of 40 CFR 52.21. The cross reference in these provisions was intended to reference the SMCs in paragraph (i)(5)(i) of the two PSD regulations, but EPA failed to make this change when the paragraphs were renumbered in an earlier rulemaking. We did not receive any comments concerning this proposed corrective action. We made the necessary correction as part of the May 16, 2008 final PM_{2.5} NSR Implementation Rule (see 73 FR 28348 and 28349); therefore it is not necessary to take any further action in this final rule with regard to the proposed correction.

VIII. Dates Associated With Implementation of the Final Rule

This section describes the key dates that we have established for implementing the final rule. In the 2007 NPRM, we indicated that different dates appeared to be appropriate for implementing the PM_{2.5} increments, each date depending on the legal authority that we relied upon to promulgate it. We described and took comment on some alternative effective dates for increments, as well. In addition, we discussed and took comment on potential implementation dates for the SILs and SMC components of the proposed rule, which we indicated were not subject to the same statutory considerations as the increments.

We received a number of comments on the different proposed dates. We carefully considered these comments in selecting the dates described below for the final rule. Some of the significant comments and our responses to those comments are provided below. The remaining comments and our responses are contained in the Response to Comments document included in the docket for this rulemaking.

A. Effective Date of the Final Rule

In the 2007 NPRM, we took comment on the effective date of the final rule by presenting the different options available for implementing the PM_{2.5} increments. Under Option 1 for developing the increments, we stated that section 166(b) of the Act specifies that increments promulgated pursuant to section 166(a) are to become effective 1 year following their promulgation. In contrast, there is no such 1-year delay or any other date prescribed for increments promulgated in accordance with section 166(f) of the Act, upon which we based Options 2 and 3 for the annual PM_{2.5} increments. Thus, increments promulgated under Option 1, which relies on the procedural provisions of section 166(b) of the Act, would normally be subject to a 1-year delay in implementation, while increments promulgated under either Option 2 or 3, relying on section 166(f) of the Act, could follow a 30- or 60-day effective date, typical of the effective date for most new rules in general. In either case, our consideration of the effective date for the PM_{2.5} increments assumed that the selected date would also be the effective date of the final rule.

In the 2007 NPRM, we took comment on some alternative approaches to establishing the effective date for PM_{2.5} increments. Specifically, while

proposing a 1-year effective date under Option 1, we requested comment on whether we could promulgate these increments under section 166(a) of the Act with an effective date of only 60 days. See 72 FR 54142.

Nine commenters supported our proposal to establish the effective date of the part 51 and 52 PSD regulations for PM_{2.5} as 1 year from the date of publication. Alternatively, two commenters encouraged us to apply the 60-day effective date, while three other commenters supported other effective dates, as described in this section.

Seven industry and industry association commenters supported our proposal to make the final rule for PM_{2.5} increments effective 1 year after promulgation. Most of these commenters cited the additional time necessary to develop the needed PM_{2.5} inventories needed for implementation of the PM_{2.5} PSD program. Two of the commenters urged EPA to allow State programs sufficient time to adopt increments, particularly if condensable particulate matter is included in the increment and its analysis. These commenters stated that the Federal rule should not be effective for 1 year. (They also stated that states should have 3 years for the associated SIP revisions.) These same commenters added that this delay would provide time for sources that have permits in the pipeline or are just about to submit an application to be able to complete the permitting process without undue delay. One of the commenters specifically voiced support for Option 1 for the effective date of the final rule (1 year) and Option 2B for the period granted for SIP revisions (3 years). This commenter also explained that this additional time may give the Agency time to promulgate better measurement methods for sources of condensable particulate matter.

Another of these commenters noted that, at the time of the proposal, the NSR portion of the CAFPFR had not yet been promulgated, and that states would need time to incorporate that rule as well as the requirements of the proposal into their SIPs. This commenter added that making the PM_{2.5} increments effective before states and sources have had a reasonable opportunity to begin, let alone complete, the SIP process for the two related rulemakings would unnecessarily complicate an already-complex regulatory process.

In contrast, the two commenters supporting the shorter effective date encouraged us to apply the 60-day period for the effective date under whatever option is finalized. One of these commenters urged us to take measures to expedite the

²⁴ This information is contained in a March 12, 2009 internal EPA memorandum from Dennis Crumpler to Raj Rao, titled "PSD Monitoring De Minimis Concentration for PM_{2.5}," which has been placed in the docket for this rulemaking.

implementation of the PM_{2.5} final rule and suggested that we choose the shortest of the proposed effective dates which are allowed under any of the applicable regulations. This commenter indicated that in light of the excessive delay in the implementation of the PM_{2.5} PSD program since the NAAQS were promulgated, the 60-day effective date should be applied under EPA's preferred option.

In light of our decision to promulgate PM_{2.5} increments under the authority of section 166(a) of the Act (proposed Option 1), we are faced with the decision as to how to most effectively implement the long-awaited PM_{2.5} increments, recognizing that the Act provides for a 1-year implementation delay. We have concluded that it is most appropriate to follow the plain language of the Act which calls for a 1-year effective date for implementing increments developed under section 166(a) of the Act. We agree with the commenters who suggested that a shortened implementation delay was desirable because of the substantial delay in the promulgation of measures to prevent significant air quality deterioration with respect to PM_{2.5}. Nevertheless, we believe it would be inappropriate in this action to disregard the statutory language which plainly calls for a 1-year delay. Accordingly, we are setting the effective date of the PM_{2.5} increments at 1 year from the date of promulgation of this final rule, consistent with the 1-year delay required under section 166(b) of the Act. We are doing this by setting the "trigger date" for PM_{2.5} as October 20, 2011. See new 40 CFR 51.166(b)(14)(i)(c) and (ii)(c), and new 40 CFR 52.21(b)(14)(i)(c) and (ii)(c). At the same time, we are establishing an effective date for the other provisions, *i.e.*, the SILs and SMC for PM_{2.5}, in this final rule as December 20, 2010. This will enable the implementation of these key elements of this rule under the Federal PSD program as soon as possible.

1. State PSD Programs

In this final rule, we are establishing the final PM_{2.5} increments as minimum program elements for all State PSD programs. Accordingly, states must submit for EPA's approval revised SIPs that incorporate the final PM_{2.5} increments or alternative measures that can be demonstrated to EPA's satisfaction to provide an equivalent level of protection as the PM_{2.5} increments. In accordance with section 166(b) of the Act, we are requiring states to submit revised implementation plans to EPA for approval within 21 months of promulgation, that is, by July 20,

2012. Section 166(b) also specifies that we must approve or disapprove these revisions within 25 months of promulgation (4 months from the statutory deadline for SIP submittal). We regard these statutory deadlines as maximum allowed timeframes for action. Moreover, we do not believe that the Act restricts our ability to approve SIP revisions requested by a State at any time before these deadlines. In this final rule, we are amending the regulatory provisions at 40 CFR 51.166(a)(6)(i) to articulate the deadline set forth by the statute for the SIP submittals involving the PM_{2.5} increments pursuant to section 166(a) of the Act.

It is very unlikely that states will be able to revise their SIPs and submit them to EPA for approval prior to the applicability date of the PM_{2.5} increments in this final rule, which is October 20, 2011. Therefore, there is likely to be a period of time after October 20, 2010 when State laws will not require PSD applicants otherwise subject to PSD for PM_{2.5} to complete an increment analysis for the PM_{2.5} increments, even though the PM_{2.5} increments, major source baseline date, and trigger date have been established as a result of this final rule. Similarly, it is not clear whether states will have the authority to consider such applicants as having triggered the minor source baseline date during this interim period before their revised PSD rules containing the PM_{2.5} increments and relevant baseline dates become effective.

The EPA does not intend to prescribe the implementation timeline for State programs; rather, each State will need to determine how increment consumption and the setting of the minor source baseline date for PM_{2.5} will occur under its own PSD program. Nevertheless, regardless of when a State begins to require PM_{2.5} increment analyses and how it chooses to set the PM_{2.5} minor source baseline date, the emissions from sources subject to PSD for PM_{2.5} on which construction commenced after October 20, 2010 (the major source baseline date) will consume PM_{2.5} increment and must be included in increment analyses occurring after the minor source baseline date is established for an area under the State's revised PSD program.

2. Federal PSD Program

The Federal PSD regulations under 40 CFR 52.21 apply where states do not have approved PSD programs and in Indian lands. In such cases, either EPA implements the PSD program or the State will implement it under authority granted by EPA through a delegation agreement.

We proposed to begin implementing the Federal PSD program for PM_{2.5} on the effective date of the final rule, *i.e.*, either 1 year from the date of publication in the Federal Register or 60 days from date of publication, if we developed the PM_{2.5} increments pursuant to proposed Option 1. Alternatively, we requested comment on whether we should delay implementation of the Federal PSD program until 25 months after promulgation, which is the latest date by which EPA is required to approve State SIP revisions. This is the same approach we took in 1988 to implement the then new NO₂ increments. See 53 FR 40638. We did not propose the 24-month delay for the PM_{2.5} increments because of the significant delay that has already occurred between the time we promulgated the PM_{2.5} NAAQS and the time the PM_{2.5} increment rulemaking would be finalized. However, we sought comment on this alternative approach because we recognized that it might not be equitable to begin implementation of the new program requirements in those few areas where the Federal program applies before the majority of states are required to implement the program.

Two commenters urged EPA to hold off implementation of State programs administered under the Federal PSD program in order to provide a uniform and consistent national approach. One State agency supported implementing the Federal PSD program with a delayed effective date of 1 year after the effective date of the final rule instead of 60 days.

We have decided to begin implementing the revised Federal PSD program as set out previously in our introductory discussion of this issue in section VIII.A. That is, the revised regulations at 40 CFR 52.21 will become effective in 60 days, on December 20, 2010. This will allow EPA or the delegated State agency to begin using the SILs and SMC for PM_{2.5} on that date, as described in section VIII.C of this preamble. However, the date established in the regulations for the trigger date will ensure that the PM_{2.5} increments do not become effective for 1 year, consistent with section 166(b) of the Act, and that the minor source baseline date cannot be established until the PM_{2.5} increments become effective. However, PSD sources subject to PM_{2.5} that receive their PSD permit after the date of publication of this final rule will be considered to consume PM_{2.5} increments by virtue of the fact that they will commence construction after the major source baseline date for PM_{2.5}, which is the date of publication of this final rule.

Thus, sources in an area subject to the Federal PSD program for $PM_{2.5}$ will be able to use the SILs and SMC as screening tools for the required $PM_{2.5}$ NAAQS compliance demonstration, but in most cases will not be required to submit a $PM_{2.5}$ increment analysis as part of a complete PSD permit application for a Federal PSD permit unless the application is submitted on or after October 20, 2011. On or after that date, when an applicant submits a complete PSD permit application that is required to address $PM_{2.5}$ under the Federal PSD program, that first application will establish the minor source baseline date for $PM_{2.5}$ in the applicable attainment or unclassifiable area.

As with the State PSD program requirements, prior to the establishment of the minor source baseline date in an area, emissions increases from minor sources in the area will be counted toward the baseline concentration, rather than to the $PM_{2.5}$ increment. As described earlier, the emissions from major stationary sources that commence construction after the major source baseline date, regardless of the date on which their PSD application is submitted, must be counted toward consumption of the $PM_{2.5}$ increments. While these sources will not be required to submit an increment analysis for $PM_{2.5}$ as part of their complete application as long as they receive their PSD permit before the trigger date for $PM_{2.5}$ (see discussion that follows in section VIII.B), the emissions increases resulting from the permitting of these sources ultimately must be counted toward the $PM_{2.5}$ increments when the first PSD permit application submitted after the trigger date establishes the minor source baseline date for the area of concern, and in all subsequent $PM_{2.5}$ increment analyses for that area.

B. Transition Period

In the 2007 NPRM, we proposed a transition period to clarify when PSD permit applications must contain an increment analysis demonstrating compliance with the $PM_{2.5}$ increments following the date the $PM_{2.5}$ increments become effective in any State or Federal PSD program. Specifically, we proposed to establish a grandfathering provision to allow complete applications submitted before the increment effective date, but for which the permit had not yet been issued by the effective date, to continue being processed using the PM_{10} Surrogate Policy to satisfy the requirement to demonstrate compliance with the new $PM_{2.5}$ requirements. The grandfathering provision for $PM_{2.5}$ was originally proposed in the 2007 NPRM

at 40 CFR 51.166(i)(10) and 40 CFR 52.21(i)(11) for State and Federal PSD programs, respectively. See 72 FR 54149 and 54154.

Three commenters supported the proposed grandfathering provision for sources that submitted a complete application before the effective date of the applicable PSD rules. Another commenter felt that it was reasonable to allow states a choice between using PM_{10} or $PM_{2.5}$ increments during a transition period including SIP approval, where applicable.

During the time since the proposal of this rule in 2007, we have reconsidered the need for the proposed transition period in the Federal PSD program to effectively implement the $PM_{2.5}$ increments. In light of the importance of preventing significant deterioration of $PM_{2.5}$ air quality and the amount of time that has passed since the initial promulgation of the $PM_{2.5}$ NAAQS, we do not believe that further delay is warranted. We expect that most permits issued after October 20, 2011 will be from sources that submitted their PSD applications after the major source baseline date for $PM_{2.5}$, which is defined as the date of publication of this final rule, so that they will be increment-consuming sources. Therefore, when these sources apply for their PSD permits, they will have had significant advance notice of when the $PM_{2.5}$ increments will become effective, i.e., 1 year from the date of publication of this final rule. The review and permitting of permit applications submitted prior to the publication date of this final rule should generally be completed prior to the effective date of $PM_{2.5}$ increments and thus effectively have a transition period of 1 year to complete processing.

Thus, we are requiring each source that receives its PSD permit after the effective date of the $PM_{2.5}$ increments, regardless of when the application was submitted, to provide a demonstration that the source's proposed emissions increase, along with other increment-consuming emissions, will not cause or contribute to a violation of the $PM_{2.5}$ increments.

Under this final rule, sources applying for a PSD permit under the Federal PSD program after the major source baseline date for $PM_{2.5}$ (i.e., after the date of publication of this final rule), but before the $PM_{2.5}$ increments become effective (i.e., the date 1 year after publication of this final rule), will be considered to consume $PM_{2.5}$ increment. While EPA will not require any such source to include a $PM_{2.5}$ increment analysis as part of its initial PSD application, an increment analysis ultimately will be required before the

permit may be issued if the date of issuance will occur after the trigger date, when the $PM_{2.5}$ increments become effective under the Federal PSD program.

Finally, for the same reasons that we are not adopting the proposed transition period that would have exempted PSD applicants with pending permit applications from demonstrating compliance with the $PM_{2.5}$ increment requirements under the Federal PSD program, we have decided not to provide an option for states to apply a transition period under 40 CFR 51.166. We believe it is appropriate for all increment-consuming sources subject to $PM_{2.5}$ to demonstrate compliance with the $PM_{2.5}$ increments when the required permit is issued after the $PM_{2.5}$ increments become effective in the State's PSD regulations.

C. SILs and SMC for $PM_{2.5}$

In the 2007 NPRM, we explained our position that SILs and SMCs are not minimum required elements of an approvable SIP. While these *de minimis* values are widely considered to be useful components for implementing the PSD program, they are not absolutely necessary for the states to implement their PSD programs. That is, states can satisfy the statutory requirements for a PSD program by requiring each PSD applicant to submit air quality monitoring data and to conduct a comprehensive air quality impacts analysis for $PM_{2.5}$ without using *de minimis* thresholds to exempt certain sources from such requirements. Because the *de minimis* values for $PM_{2.5}$ (and other pollutants) are not mandatory elements, we proposed not to establish specific deadlines for submitting revisions to incorporate the specific values for $PM_{2.5}$ into SIPs.

One State/local commenter agreed that the SILs and SMCs should not be a required element of the PSD SIP. Another State/local commenter agreed with our proposal, but stated that EPA has the authority to include SILs and SMCs as minimum program requirements per the opinion set forth in *Alabama Power*. This commenter added that the EPA Environmental Appeals Board has affirmed EPA's interpretation of the Act to allow EPA to evaluate the significance of a source's impact when determining whether the source's emissions would "cause or contribute" to a NAAQS or increments violation under section 165(a)(3) of the Act.

Two commenters disagreed with our proposed position and argued that SILs and SMCs should be mandatory elements of a State PSD program. One

of these commenters argued that the requirement to model without the use of screening models with SILs and SMCs is so unreasonable that EPA must require that states adopt the SILs and SMCs to meet the Purpose clause of the Act, which requires a balancing of environmental and economic considerations. The other opposing commenter stated that the increments, SILs, and SMCs need to be adopted as a single regulatory approach because the SILs and SMCs define when additional work is needed to ensure that PSD requirements, such as maintaining adequate increment, are met. This commenter added that there is no reason for sources to be placed in the position of conducting expensive modeling that can delay a project when it is unnecessary from an air quality perspective.

We agree that the SILs and SMCs used as *de minimis* thresholds for the various pollutants are useful tools that enable permitting authorities and PSD applicants to screen out "insignificant" activities; however, the fact remains that these values are not required by the Act as part of an approvable SIP program. We believe that most states are likely to adopt the SILs and SMCs because of the useful purpose they serve regardless of our position that the values are not mandatory. Alternatively, states may develop more stringent values if they desire to do so. In any case, states are not under any SIP-related deadline for revising their PSD programs to add these screening tools.

Using the SILs for $PM_{2.5}$, when a proposed major new source or major modification of $PM_{2.5}$ predicts (via air quality modeling) an impact less than the $PM_{2.5}$ *de minimis* value, the proposed source or modification is not considered to have a significant air quality impact and would not need to complete a cumulative impact analysis involving an analysis of other sources in the area. Also, a source with a *de minimis* ambient impact would not be considered to cause or contribute to a violation of either the $PM_{2.5}$ NAAQS or increments.

The $PM_{2.5}$ SILs will become effective under the Federal PSD program on the effective date of this final rule, that is, on December 20, 2010, when either EPA, or a State acting under a delegation of EPA's authority, implements the revised PSD permitting requirements for $PM_{2.5}$ pursuant to 40 CFR 52.21. The SILs will be for use initially with the compliance demonstration for the $PM_{2.5}$ NAAQS, and later for the $PM_{2.5}$ increment analysis, under the Federal PSD program. We emphasize, however, that

the $PM_{2.5}$ SILs are not intended to be used as part of the determination of adverse impacts on AQRVs for $PM_{2.5}$ in Class I areas.

Similarly, we intend to use the $PM_{2.5}$ SMC (4 $\mu g/m^3$, 24-hour average) as a screening tool in the Federal PSD permit program beginning on December 20, 2010. Accordingly, when either the modeled $PM_{2.5}$ impact of, or the existing ambient air quality within the area of, the proposed new major source or major modification is less than the $PM_{2.5}$ SMC, the reviewing authority may exempt the source or modification from the monitoring data requirements for $PM_{2.5}$ under 40 CFR 52.21(n).

IX. Other Regulatory Changes

The Act provides that the PSD regulations apply to areas designated as "attainment" or "unclassifiable" as defined by the Act. When the original regulations were written, the Act provisions for designating areas as either "attainment" or "unclassifiable" were contained in sections 107(d)(1)(D) and (E), respectively. In 1990, Congress revised section 107 and changed the relevant paragraphs defining "attainment" and "unclassifiable" areas to sections 107(d)(1)(A)(ii) and (iii), respectively. In accordance with these statutory changes, we are correcting the references to the statutory classifications contained in the existing PSD rules to match the revised paragraphs in the Act. See revised 40 CFR 51.166(b)(14)(iii)(o) and (15)(i) and (ii), and 40 CFR 52.21(b)(14)(iii)(o) and (15)(i) and (ii).

In adding the SILs for $PM_{2.5}$ in this final rule, we restructured paragraph (k) ("Source impact analysis") in the existing PSD regulations at 40 CFR 51.166 and 52.21. Under the restructuring of paragraph (k), old paragraph (k)(2) is now paragraph (k)(1)(ii). To accommodate this restructuring change, we are also revising grandfathering provisions that are contained in existing paragraphs (i)(8) and (i)(9) at 40 CFR 51.166, and paragraphs (i)(9) and (i)(10) at 40 CFR 52.21, which contained references to requirements contained in paragraph (k)(2). As revised, the grandfathering provisions now reference new paragraph (k)(1)(ii).

X. Statutory and Executive Order Reviews

A. Executive Order 12866—Regulatory Planning and Review

Under Executive Order 12866 (58 FR 51735, October 4, 1993), this action is a "significant regulatory action" because it raises novel legal or policy issues arising out of legal mandates, the

President's priorities, or the principle set forth in the Executive Order. Accordingly, EPA submitted this action to OMB for review under Executive Order 12866 and any changes made in response to OMB recommendations have been documented in the docket for this action.

B. Paperwork Reduction Act

The information collection requirements in this rule have been submitted for approval to the OMB under the *Paperwork Reduction Act*, 44 U.S.C. 3501 *et seq.* The information collection requirements are not enforceable until OMB approves them.

Pursuant to title I, part C, of the Act, the PSD program requires the owner or operator to obtain a permit prior to either constructing a new major stationary source of air pollutants or making a major modification to an existing major stationary source. The information collection for sources under PSD results from the requirement for owners or operators to submit applications for NSR permits. In some cases, sources must conduct preconstruction monitoring to determine the existing ambient air quality. For reviewing authorities, the information collection results from the requirement to process permit applications and issue permits, and to transmit associated information to EPA. The EPA oversees the PSD program, and the information collected by sources and reviewing authorities is used to ensure that the program is properly implemented.

The final rule will increase the PSD permitting burden for owners and operators of major stationary sources of $PM_{2.5}$ emissions by adding $PM_{2.5}$ increments to the list of existing increments for which air quality impact analyses must be carried out to track the amount of increment consumed by the proposed source and other sources in the area. Over the 3-year period covered by the ICR, we estimate an average annual burden totaling about 29,000 hours and \$2.8 million for all industry entities that will be affected by the final rule. For the same reasons, we also expect the final rule (when fully implemented) to increase burden for the State and local authorities reviewing PSD permit applications. In addition, there will be additional burden for State and local agencies to revise their SIPs to incorporate the proposed changes. Over the 3-year period covered by the ICR, we estimate that the average annual burden for all State and local reviewing authorities will total about 7,500 hours and \$581,000. Burden is defined at 5 CFR 1320.3(b).

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for EPA's regulations in 40 CFR are listed in 40 CFR part 9. When this ICR is approved by OMB, the Agency will publish a technical amendment to 40 CFR part 9 in the *Federal Register* to display the OMB control number for the approved information collection requirements contained in this final rule.

C. Regulatory Flexibility Act

The Regulatory Flexibility Act (RFA) generally requires an agency to prepare a regulatory flexibility analysis of any rule subject to notice and comment rulemaking requirements under the Administrative Procedure Act or any other statute unless the Agency certifies that the rule will not have a significant economic impact on a substantial number of small entities. Small entities include small businesses, small organizations, and small governmental jurisdictions.

For purposes of assessing the impacts of this rule on small entities, "small entity" is defined as: (1) A small business as defined by the Small Business Administration's regulations at 13 CFR 121.201; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of this final rule on small entities, I certify that this action will not have a significant economic impact on a substantial number of small entities. This final rule will not impose any requirements on small entities because small entities are not subject to the requirements of this rule.

D. Unfunded Mandates Reform Act

This action contains no Federal mandates under the provisions of Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), 2 U.S.C. 1531–1538 for State, local, or tribal governments or the private sector. The action imposes no enforceable duty on any State, local or tribal governments or the private sector. The final rule adds only a relatively small number of new requirements to the existing permit requirements already in place under the PSD program, since states are currently implementing a PM_{10} surrogate program pursuant to EPA guidance. Thus, this

action is not subject to the requirements of sections 202 or 205 of UMRA.

This rule is also not subject to the requirements of section 203 of UMRA because it contains no regulatory requirements that might significantly or uniquely affect small governments. The final rule applies only to new major stationary sources and to major modifications at existing major stationary sources.

E. Executive Order 13132—Federalism

This final rule does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive Order 13132. The final rule makes relatively minor changes to the established PSD program, simply making it possible for states to implement PSD for $PM_{2.5}$ instead of relying on PM_{10} as a surrogate. Thus, Executive Order 13132 does not apply to this rule. In the spirit of Executive Order 13132, and consistent with EPA policy to promote communications between EPA and State and local governments, EPA specifically solicited comment on the proposed rule from State and local officials.

F. Executive Order 13175—Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications, as specified in Executive Order 13175 (65 FR 67249, November 9, 2000). The final rule provides the elements to implement a $PM_{2.5}$ PSD program in attainment areas. The Act provides for states to develop plans to regulate emissions of air pollutants within their jurisdictions. The Tribal Air Rule (TAR) under the Act gives tribes the opportunity to develop and implement Act programs to attain and maintain the $PM_{2.5}$ NAAQS, but leaves to the discretion of the tribes the decision of whether to develop these programs and which programs, or appropriate elements of a program, they will adopt. Thus, Executive Order 13175 does not apply to this action.

The EPA did reach out to national tribal organizations in 2006 to provide a forum for tribal professionals to provide input to the rulemaking. However, not much participation or input was received.

G. Executive Order 13045—Protection of Children From Environmental Health and Safety Risks

This action is not subject to Executive Order 13045 (62 FR 19885, April 23, 1997) because it is not economically significant as defined in Executive Order 12866, and because the Agency does not believe the environmental health or safety risks addressed by this action present a disproportionate risk to children. One of the basic requirements of the PSD program is that new and modified major sources must demonstrate that any new emissions do not cause or contribute to air quality in violation of the NAAQS.

H. Executive Order 13211—Actions That Significantly Affect Energy Supply, Distribution, or Use

This action is not a "significant energy action" as defined in Executive Order 13211 (66 FR 28355, May 22, 2001) because it is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Further, we have concluded that this rule is not likely to have any adverse energy effects.

I. National Technology Transfer and Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, 12(d) (15 U.S.C. 272 note) directs EPA to use voluntary consensus standards in its regulatory activities unless to do so would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., materials specifications, test methods, sampling procedures, and business practices) that are developed or adopted by voluntary consensus standards bodies. The NTTAA directs EPA to provide Congress, through OMB, explanations when the Agency decides not to use available and applicable voluntary consensus standards.

This action does not involve technical standards. Therefore, EPA did not consider the use of any voluntary consensus standards.

J. Executive Order 12898—Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

Executive Order 12898 (59 FR 7629, Feb. 16, 1994) establishes Federal executive policy on environmental justice. Its main provision directs Federal agencies, to the greatest extent practicable and permitted by law, to make environmental justice part of their mission by identifying and addressing,

as appropriate, disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority populations and low-income populations in the United States.

The EPA has determined that this final rule will not have disproportionately high and adverse human health or environmental effects on minority or low-income populations because it does not affect the level of protection provided to human health or the environment. This final rule will provide regulatory certainty for implementing the preconstruction NSR permitting program for PM_{2.5}. However, the requirements are similar to the existing requirements of the PM₁₀ program and hence do not impact the human health or environmental effects.

K. Congressional Review Act

The Congressional Review Act, 5 U.S.C. 801 *et seq.*, as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing this rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the *Federal Register*. A major rule cannot take effect until 60 days after it is published in the

Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(2). Nevertheless, this rule needs to be reviewed for the PM_{2.5} increments being promulgated herein so that they can be scrutinized by Congress as intended under section 166(b) of the Act. Even though the PM_{2.5} increments will not become applicable for 1 year, the final rule will become effective 60 days from the date of publication, that is, on December 20, 2010, for the screening tools (SILs and SMC) being established in this rule.

XI. Judicial Review

Under section 307(b)(1) of the Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the District of Columbia Circuit by December 20, 2010. Any such judicial review is limited to only those objections that are raised with reasonable specificity in timely comments. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this rule for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the effectiveness of such rule or action. Under section 307(b)(2) of the Act, the requirements of this final action may not be challenged later in civil or criminal proceedings brought by us to enforce these requirements.

XII. Statutory Authority

The statutory authority for this final action is provided by sections 101, 160,

163, 165, 166, 301, and 307(d) of the Act as amended (42 U.S.C. 7401, 7470, 7473, 7475, 7476, 7601, and 7607(d)).

List of Subjects

40 CFR Part 51

Administrative practices and procedures, Air pollution control, Environmental protection, Intergovernmental relations.

40 CFR Part 52

Administrative practices and procedures, Air pollution control, Environmental protection, Intergovernmental relations.

Dated: September 30, 2010.

Lisa P. Jackson,
Administrator

■ For the reasons set out in the preamble, title 40, chapter I of the Code of Federal Regulations is amended as follows:

PART 51—[AMENDED]

■ 1. The authority citation for part 51 continues to read as follows:

Authority: 23 U.S.C. 101, 42 U.S.C. 7401–7671q.

Subpart I—[Amended]

■ 2. Section 51.155 is amended by revising the table in paragraph (b)(2) to read as follows:

§ 51.155 Permit requirements.

(b) * * *

(2) * * *

Pollutant	Annual	Averaging time (hours)			
		24	8	3	1
SO ₂	1.0 µg/m ³	5 µg/m ³		25 µg/m ³	
PM ₁₀	1.0 µg/m ³	5 µg/m ³			
PM _{2.5}	0.3 µg/m ³	1.2 µg/m ³			
NO ₂	1.0 µg/m ³				
CO			0.5 mg/m ³		2 mg/m ³

■ 3. Section 51.166 is amended as follows:

- a. By revising paragraph (a)(6)(i);
- b. By revising paragraph (b)(14)(i)(a);
- c. By removing the period at the end of paragraph (b)(14)(i)(b) and adding "and" in its place;
- d. By adding paragraph (b)(14)(i)(c);
- e. By revising paragraph (b)(14)(ii)(a);
- f. By removing the period at the end of paragraph (b)(14)(ii)(b) and adding "and" in its place;
- g. By adding paragraph (b)(14)(ii)(c);
- h. By revising paragraph (b)(14)(ii)(a);

■ i. By revising paragraph (b)(15)(i) and paragraph (b)(15)(ii) introductory text;

■ j. By revising the table in paragraph (c)(1);

■ k. By revising paragraph (c)(2);

■ l. By revising paragraph (i)(5)(i)(c);

■ m. By redesignating existing paragraphs (i)(5)(i)(d) through (j) as paragraphs (i)(5)(i)(e) through (k);

■ n. By adding new paragraph (i)(5)(i)(d);

■ o. By removing "(k)(2)" from paragraph (i)(8) and adding "(k)(1)(ii)" in its place;

■ p. By removing in two places "(k)(2)" from paragraph (i)(9) and adding "(k)(1)(ii)" in those places;

■ q. By revising paragraph (k);

■ r. By removing the words "particulate matter" in the last sentence of paragraph (p)(4) introductory text and adding in their place "PM_{2.5}, PM₁₀"; and

■ s. By revising the table in paragraph (p)(4).

§ 51.166 Prevention of significant deterioration of air quality.

(a) * * *

(6) * * *

(i) Any State required to revise its implementation plan by reason of an amendment to this section, with the exception of amendments to add new maximum allowable increases or other measures pursuant to section 166(a) of the Act, shall adopt and submit such plan revision to the Administrator for approval no later than 3 years after such amendment is published in the Federal Register. With regard to a revision to an implementation plan by reason of an amendment to paragraph (c) of this section to add maximum allowable increases or other measures, the State shall submit such plan revision to the Administrator for approval within 21 months after such amendment is published in the Federal Register.

(b) * * *

(14)(i) * * *

(a) In the case of PM_{10} and sulfur dioxide, January 6, 1975;

(c) In the case of $PM_{2.5}$, October 20, 2010.

(ii) * * *

(a) In the case of PM_{10} and sulfur dioxide, August 7, 1977;

(c) In the case of $PM_{2.5}$, October 20, 2011.

(iii) * * *

(a) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; and

* * * * *

(15)(i) *Baseline area* means any intrastate area (and every part thereof) designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the baseline date is established, as follows: Equal to or greater than $1 \mu\text{g}/\text{m}^3$ (annual average) for SO_2 , NO_2 , or PM_{10} ; or equal to or greater than $0.3 \mu\text{g}/\text{m}^3$ (annual average) for $PM_{2.5}$.

(ii) Area redesignations under section 107(d)(1)(A)(ii) or (iii) of the Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:

(c) * * *

(1) * * *

Pollutant	Maximum allowable increase (micrograms per cubic meter)
Class I Area	
$PM_{2.5}$:	
Annual arithmetic mean	1
24-hr maximum	2
PM_{10} :	
Annual arithmetic mean	4
24-hr maximum	8
Sulfur dioxide:	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25
Nitrogen dioxide:	
Annual arithmetic mean	25
Class II Area	
$PM_{2.5}$:	
Annual arithmetic mean	4
24-hr maximum	9
PM_{10} :	
Annual arithmetic mean	17
24-hr maximum	30
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	512
Nitrogen dioxide:	
Annual arithmetic mean	25
Class III Area	
$PM_{2.5}$:	
Annual arithmetic mean	8
24-hr maximum	18
PM_{10} :	
Annual arithmetic mean	34
24-hr maximum	60
Sulfur dioxide:	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum	700
Nitrogen dioxide:	

Pollutant	Maximum allowable increase (micrograms per cubic meter)
Annual arithmetic mean	50

(2) Where the State can demonstrate that it has alternative measures in its plan other than maximum allowable increases as defined under paragraph (c)(1) of this section, that satisfy the requirements in sections 166(c) and 166(d) of the Clean Air Act for a regulated NSR pollutant for which the Administrator has established maximum allowable increases pursuant to section 166(a) of the Act, the requirements for maximum allowable increases for that pollutant under paragraph (c)(1) of this section shall not apply upon approval of the plan by the Administrator. The following regulated NSR pollutants are eligible for such treatment:

- (i) Nitrogen dioxide.
- (ii) $PM_{2.5}$.
- (i) * * *
- (5) * * *
- (i) * * *
- (c) $PM_{2.5}$ — $4 \mu\text{g}/\text{m}^3$, 24-hour average;
- (d) PM_{10} — $10 \mu\text{g}/\text{m}^3$, 24-hour average;
- * * *

(k) *Source impact analysis*—(1) *Required demonstration.* The plan shall provide that the owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reduction (including secondary emissions), would not cause

or contribute to air pollution in violation of:

(i) Any national ambient air quality standard in any air quality control region; or

(ii) Any applicable maximum allowable increase over the baseline concentration in any area.

(2) *Significant impact levels.* The plan may provide that, for purposes of $PM_{2.5}$, the demonstration required in paragraph (k)(1) of this section is deemed to have been made if the emissions increase from the new stationary source alone or from the modification alone would cause, in all areas, air quality impacts less than the following amounts:

Pollutant	Averaging time	Class I area	Class II area	Class III area
$PM_{2.5}$	Annual	$0.06 \mu\text{g}/\text{m}^3$	$0.3 \mu\text{g}/\text{m}^3$	$0.3 \mu\text{g}/\text{m}^3$
	24-hour	$0.07 \mu\text{g}/\text{m}^3$	$1.2 \mu\text{g}/\text{m}^3$	$1.2 \mu\text{g}/\text{m}^3$

(5) * * *

Pollutant	Maximum allowable increase (micrograms per cubic meter)
$PM_{2.5}$	
Annual arithmetic mean	4
24-hr maximum	9
PM_{10}	
Annual arithmetic mean	17
24-hr maximum	30
Sulfur dioxide	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	325
Nitrogen dioxide	
Annual arithmetic mean	25

■ 4. Appendix S to part 51 is amended by revising the table in section III A to read as follows:

Appendix S to Part 51—Emission Offset Interpretative Ruling

Pollutant	Annual	24-hour	3-hour	1-hour
SO_2	$1.0 \mu\text{g}/\text{m}^3$	$5 \mu\text{g}/\text{m}^3$	$25 \mu\text{g}/\text{m}^3$	
PM_{10}	$1.0 \mu\text{g}/\text{m}^3$	$5 \mu\text{g}/\text{m}^3$		

Pollutant	Annual	Averaging time (hours)			
		24	8	3	1
PM _{2.5}	0.3 µg/m ³	1.2 µg/m ³			
NO ₂	1.0 µg/m ³				
CO			0.5 mg/m ³		2 mg/m ³

PART 52—[AMENDED]

1. The authority citation for part 52 continues to read as follows:

Authority: 42 U.S.C. 7401, *et seq.*

Subpart A—[Amended]

2. Section 52.21 is amended as follows:

- a. By revising paragraph (b)(14)(i)(a);
- b. By removing the period at the end of paragraph (b)(14)(i)(b) and adding “; and” in its place;
- c. By adding paragraph (b)(14)(i)(c);
- d. By revising paragraph (b)(14)(ii)(a);
- e. By removing the period at the end of paragraph (b)(14)(ii)(b) and adding “; and” in its place;
- f. By adding paragraph (b)(14)(ii)(c);
- g. By revising paragraph (b)(14)(iii)(a);
- h. By revising paragraph (b)(15)(i) and paragraph (b)(15)(ii) introductory text;
- i. By revising the table in paragraph (c);
- j. By revising paragraph (i)(5)(i);
- k. By removing “(k)(2)” from paragraph (i)(9) and adding “(k)(1)(ii)” in its place;

- l. By removing in two places “(k)(2)” from paragraph (i)(10) and adding “(k)(1)(ii)” in those places;
- m. By revising paragraph (k);
- n. By removing the words “particulate matter” in the last sentence of paragraph (p)(5) introductory text and adding in their place “PM_{2.5}, PM₁₀”; and
- o. By revising the table in paragraph (p)(5).

§ 52.21 Prevention of significant deterioration of air quality.

- (b) * * *
- (14)(i) * * *
- (a) In the case of PM₁₀ and sulfur dioxide, January 6, 1975;
- (c) In the case of PM_{2.5}, October 20, 2010.
- (ii) * * *
- (a) In the case of PM₁₀ and sulfur dioxide, August 7, 1977;
- (c) In the case of PM_{2.5}, October 20, 2011.
- (iii) * * *
- (a) The area in which the proposed source or modification would construct is designated as attainment or

unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; and

(15)(i) *Baseline area* means any intrastate area (and every part thereof) designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the baseline date is established, as follows: equal to or greater than 1 µg/m³ (annual average) for SO₂, NO₂, or PM₁₀; or equal or greater than 0.3 µg/m³ (annual average) for PM_{2.5}.

(ii) Area redesignations under section 107(d)(1)(A)(ii) or (iii) of the Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:

(c) * * *

Pollutant	Maximum allowable increase (micrograms per cubic meter)
Class I Area	
PM _{2.5} :	
Annual arithmetic mean	1
24-hr maximum	2
PM ₁₀ :	
Annual arithmetic mean	4
24-hr maximum	8
Sulfur dioxide:	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25
Nitrogen dioxide:	
Annual arithmetic mean	2.5
Class II Area	
PM _{2.5} :	
Annual arithmetic mean	4
24-hr maximum	9
PM ₁₀ :	
Annual arithmetic mean	17
24-hr maximum	30
Sulfur dioxide:	
Annual arithmetic mean	20

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Pollutant	Maximum allowable increase (micrograms per cubic meter)
24-hr maximum	31
3-hr maximum	512
Nitrogen dioxide	
Annual arithmetic mean	25
Class III Area	
PM _{2.5}	
Annual arithmetic mean	8
24-hr maximum	18
PM ₁₀	
Annual arithmetic mean	34
24-hr maximum	60
Sulfur dioxide	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum	703
Nitrogen dioxide	
Annual arithmetic mean	50

(i) * * *

(5) * * *

(i) The emissions increase of the pollutant from the new source or the emissions increase of the pollutant from the modification would cause, in any area, air quality impacts less than the following amounts:

(a) Carbon monoxide—575 µg/m³, 8-hour average;

(b) Nitrogen dioxide—14 µg/m³, annual average;

(c) PM_{2.5}—4 µg/m³, 24-hour average;

(d) PM₁₀—10 µg/m³, 24-hour average;

(e) Sulfur dioxide—13 µg/m³, 24-hour average;

(f) Ozone;

(g) Lead—0.1 µg/m³, 3-month average;

(h) Fluorides—0.25 µg/m³, 24-hour average;

(i) Total reduced sulfur—10 µg/m³,

1-hour average;

(f) Hydrogen sulfide—0.2 µg/m³,

1-hour average;

(k) Reduced sulfur compounds—10 µg/m³, 1-hour average; or

Note to paragraph (c)(5)(ii)(f): No *de minimis* air quality level is provided for ozone. However, any net emissions increase of 100 tons per year or more of volatile organic compounds or nitrogen oxides subject to PSD would be required to perform an ambient impact analysis, including the gathering of ambient air quality data.

* * *

(k) *Source impact analysis*—(1) *Required demonstration.* The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in

conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of.

(i) Any national ambient air quality standard in any air quality control region; or

(ii) Any applicable maximum allowable increase over the baseline concentration in any area.

(2) *Significant impact levels.* For purposes of PM_{2.5}, the demonstration required in paragraph (k)(1) of this section is deemed to have been made if the emissions increase from the new stationary source alone or from the modification alone would cause, in all areas, air quality impacts less than the following amounts:

Pollutant	Averaging time	Class I area	Class II area	Class III area
PM _{2.5}	Annual	0.06 µg/m ³	0.3 µg/m ³	0.3 µg/m ³
	24-hour	0.07 µg/m ³	1.2 µg/m ³	1.2 µg/m ³

(p) * * *

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(5) * * *

Pollutant	Maximum allowable increase (micrograms per cubic meter)
PM_{2.5}:	
Annual arithmetic mean	4
24-hr maximum	9
PM₁₀:	
Annual arithmetic mean	17
24-hr maximum	30
Sulfur dioxide:	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	325
Nitrogen dioxide:	
Annual arithmetic mean	25

* * *
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In the
United States Court of Appeals
For the Seventh Circuit

No. 12-3388

CLEAN WATER ACTION COUNCIL OF NORTHEASTERN
WISCONSIN, INC., *et al.*,

Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*,
Respondents.

Petition for Review of an Order of the
Environmental Protection Agency

ARGUED SEPTEMBER 23, 2013 — DECIDED AUGUST 29, 2014

Before EASTERBROOK, SYKES, and TINDER, *Circuit Judges.*

EASTERBROOK, *Circuit Judge.* The Clean Air Act, 42 U.S.C. §§ 7401–7671q, invites each state to craft a plan (a “state implementation plan”) to control the levels of certain air pollutants. Most state plans include “Prevention of Significant Deterioration” (PSD) programs. These programs are designed to prevent backsliding in “attainment areas” (regions that meet or exceed the Act’s air quality standards), while still

allowing some new sources of pollution. A PSD program prevents designated sources from propelling the region's aggregate emissions over specified limits. The Act establishes these limits by setting a baseline and then a cap on pollutants above that baseline. The space between the baseline and the cap is the "increment". In the jargon of the regulations, new sources that create a net increase in emissions "consume increment". To simplify matters, we refer to the increment as the state's pollutant allowance. The Act grandfathers sources operational before 1975: the baseline incorporates their emissions, with post-1975 sources counting against the allowance. See 42 U.S.C. §7479(4).

Title V of the Act, 42 U.S.C. §§ 7661–7661f, requires each covered stationary source to have an operating permit. Permits implementing Title V specify pollution-control obligations for each source. The statute allows states to administer certain aspects of the air-pollution-control regime—including Title V permits—subject to federal review.

In 2002 Georgia-Pacific asked Wisconsin to renew the Title V permit for its pre-1975 paper mill. While Wisconsin weighed that application, Georgia-Pacific modified a paper machine at the plant. The application for a permit authorizing this modification was unopposed, and the permit issued in February 2004. In 2011 Wisconsin reissued the whole plant's operating permit. Clean Water Action Council asked EPA to reject the state's decision, arguing that Wisconsin's regulations (and their application to Georgia-Pacific) incorrectly implemented the Act. The Council believes that modifications to any part of a plant, such as the one Georgia-Pacific made in 2004, require all emissions from the plant—including pre-1975 emissions incorporated into the base-

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line—to count against the state’s allowance. If that’s so, the whole plant might need to close for lack of available allowance. But EPA declined to object, see *In re Georgia Pacific Consumer Products LP Plant*, 2012 EPA CAA Title V LEXIS 7 (July 23, 2012), concluding that Wisconsin’s approach is consonant with the agency’s understanding of the statute: Modifications to pre-1975 sources do not mean that the whole plant’s emissions count against the state’s allowance. Only increases caused by the modifications count, the EPA concluded. After the agency published that order, the Council sought review under 42 U.S.C. §7607(b).

Jurisdiction comes first. EPA argues that the Council necessarily challenges the regulations (75 Fed. Reg. 64,864 (Oct. 20, 2010)) that say which permits may be renewed. Section 7607(b) requires that challenges to “nationally applicable regulations” be brought before the D.C. Circuit, while challenges to actions that are “locally or regionally applicable may be filed only in the United States Court of Appeals for the appropriate circuit”. The statute also requires that both kinds of challenge begin within 60 days of a regulation’s publication. EPA contends that this court lacks jurisdiction because the Council brought the challenge belatedly and in the wrong circuit. Opinions from the Tenth and D.C. Circuits support the agency’s stance. See *Utah v. EPA*, 750 F.3d 1182, 1184 (10th Cir. 2014); *Oklahoma Department of Environmental Quality v. EPA*, 740 F.3d 185, 191 (D.C. Cir. 2014); *Medical Waste Institute v. EPA*, 645 F.3d 420, 427 (D.C. Cir. 2011); *Motor & Equipment Manufacturers Association v. EPA*, 142 F.3d 449, 460 (D.C. Cir. 1998); *Edison Electric Institute v. EPA*, 996 F.2d 326, 331 (D.C. Cir. 1993); *Natural Resources Defense Council v. NRC*, 666 F.2d 595, 602 (D.C. Cir. 1981).

We conclude, to the contrary, that the venue and filing provisions of §7607(b) are not jurisdictional. The EPA disregards the Supreme Court's many opinions discussing the difference between jurisdictional and claim-processing rules. See, e.g., *Sebelius v. Auburn Regional Medical Center*, 133 S. Ct. 817, 824–26 (2013); *Henderson v. Shinseki*, 131 S. Ct. 1197, 1202–06 (2011); *Reed-Elsevier, Inc. v. Muchnick*, 559 U.S. 154, 160–66 (2010). See also *Webster v. Caraway*, No. 14-1049 (7th Cir. Aug. 1, 2014), slip op. 7–11. Venue rules have long been understood as non-jurisdictional. See *Leroy v. Great Western United Corp.*, 443 U.S. 173, 180 (1979). The Supreme Court also has held that most filing deadlines are statutes of limitations or claim-processing rules. See *Auburn*, 133 S. Ct. at 824–25 (listing cases); *Henderson*, 131 S. Ct. at 1203 (“Filing deadlines, such as the 120-day filing deadline at issue here, are quintessential claim-processing rules.”); *Arbaugh v. Y & H Corp.*, 546 U.S. 500, 510–16 (2006); *Eberhart v. United States*, 546 U.S. 12 (2005); *Kontrick v. Ryan*, 540 U.S. 443, 452–56 (2004). While there is an exception when it comes to appeals from district courts, see *Bowles v. Russell*, 551 U.S. 205, 212–13 (2007) (interpreting 28 U.S.C. §2107), the Court has rejected arguments that other filing deadlines are jurisdictional. *Henderson*, 131 S. Ct. at 1203. Instead, “[t]he Court’s recent cases require a ‘clear statement’ or ‘clear indication’ from Congress before a statute prescribing a precondition to bringing suit will be construed as jurisdictional.” *Miller v. FDIC*, 738 F.3d 836, 844 (7th Cir. 2013).

Neither EPA nor Georgia-Pacific points to such a statement; we couldn’t find one. The circuit-level decisions we have cited do not do so either. *Utah v. EPA* does not give a reason; it cites *Oklahoma Department of Environmental Quality* as authoritative. *Oklahoma Department of Environmental Quali-*

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ty does not give a reason; it cites *Medical Waste Institute* as authoritative. *Medical Waste Institute* does not give a reason; it cites *Motor & Equipment Manufacturers Association* as authoritative. And so the chain of citations goes, until we reach *Natural Resources Defense Council*—which does give a reason (in addition to citing five more decisions, dating to 1974). When addressing the Hobbs Act, 28 U.S.C. §2344, the court tells us that a

time limit [for initiating a contest to a regulation], like other similar limitations, serves the important purpose of imparting finality into the administrative process, thereby conserving administrative resources and protecting the reliance interests of regulatees who conform their conduct to the regulations. These policies would be frustrated if untimely procedural challenges could be revived by simply filing a petition for rulemaking requesting rescission of the regulations and then seeking direct review of the petition's denial.

666 F.2d at 602 (footnote omitted). This is exactly the sort of thing that the Supreme Court has held does *not* mark a rule as jurisdictional. *NRDC* tells us why the Hobbs Act and similar laws, such as §7607(b), contain time limits, not why filing deadlines are jurisdictional. The law is full of time limits, which serve valuable functions, but they are enforced when their beneficiaries bring them to the court's attention and stand on their rights; there is no need to declare them "jurisdictional," which means that they must be considered ahead of all other issues, even if all litigants forfeit, or even waive, their benefits. Any contention along the lines of "time limits are beneficial, so they must be jurisdictional" did not survive *Kontrick* and its successors, such as *Henderson* and *Auburn*.

Congress could have framed the filing and venue rules in jurisdictional terms, but it did not. Section 7607(b) does not

mention jurisdiction. *Auburn*, 133 S. Ct. at 824–25; *Henderson*, 131 S. Ct. at 1204–05; *Miller*, 738 F.3d at 844–45; *Webster*, slip op. 7–8. Nor does §7607(b) use language that is traditionally understood as jurisdictional. And the Supreme Court has not indicated that the §7607 filing deadline is jurisdictional. That the Council did not bring its claim within 60 days of the regulation’s publication (or in the D.C. Circuit) therefore does not affect this court’s jurisdiction.

Because our decision creates a conflict among the circuits on the question whether the timing and venue rules in §7607(b) are jurisdictional, it has been circulated to all judges in regular active service. See Circuit Rule 40(e). None requested a hearing en banc.

The 60-day limit remains a binding rule, however, as does the venue requirement—and EPA has invoked the benefit of each. But although jurisdiction must be resolved ahead of other issues, see *Steel Co. v. Citizens for a Better Environment*, 523 U.S. 83 (1998), there is no necessary priority among non-jurisdictional issues. The EPA’s contention that this challenge to a permit (and to one state’s regulation) is “really” or “necessarily” a contest to a nationally applicable federal regulation would take the court into difficult ground. Cf. *Environmental Defense v. Duke Energy Corp.*, 549 U.S. 561 (2007). And for no good reason; the meaning of the statute is more important than what the Council’s argument implies about some regulation. Because the EPA’s decision can be sustained without deciding whether the Council’s contentions necessarily undercut a federal regulation, we start (and end) with a discussion of the statute.

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The language that matters is in 42 U.S.C. §7479(4):

[1] The term "baseline concentration" means, with respect to a pollutant, the ambient concentration levels which exist at the time of the first application for a permit in an area subject to this part ... [2] Such ambient concentration levels shall take into account all projected emissions in, or which may affect, such area from any major emitting facility on which construction commenced prior to January 6, 1975, but which has not begun operation by the date of the baseline air quality concentration determination. [3] Emissions of sulfur oxides and particulate matter from any major emitting facility on which construction commenced after January 6, 1975, shall not be included in the baseline and shall be counted against the maximum allowable increases in pollutant concentrations established under this part.

We have added the numbers in brackets to facilitate parsing the statute.

The Council argues that §7479(4) is clear. According to it, the third sentence means that the 2004 modifications require reallocating the entire plant's emissions toward Wisconsin's pollutant allowance. Section 7479(2)(C) tells us that "construction" includes modifications, and the Council sees in sentence 3 a rule that to modify one machine is to modify the whole plant. If the plant has been modified, it is a new source that can operate only if enough new allowance is available. EPA, on the other hand, reads sentences 2 and 3 together to mean that the pre-1975 emissions remain as part of the baseline, while any new emissions attributable to the 2004 modifications are counted toward the pollutant allowance. The statute does not explicitly address the treatment of emissions from a plant, only one part of which has been modified (and thus is treated as a new source). EPA concludes that the statute is ambiguous and the doctrine announced in *Chevron* calls for courts to respect the agency's

interpretation. See *Chevron USA Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984). The Council concedes that, if the EPA is right on the law, or if *Chevron* applies, then Georgia-Pacific is entitled to its permit.

The statute is not as clear as the Council believes it to be. Two things are plain: (1) Emissions from pre-1975 sources, up to the 1975 level, count as part of the baseline and not toward the overall emissions allowances (sentences 1 and 2); (2) Emissions from post-1975 modifications to pre-1975 sources (in this case, the modified paper machine) count against a state's pollutant allowance (sentence 3). But the statute does not tell us what happens to the pre-1975 plant and its other machines, or whether a modification changes the relation between the baseline and the new allowance. Sentence 3 could be read to mean that modifications to pre-1975 sources require counting emissions previously included in the baseline against the state's allowance. But this is an interpretation, not the only interpretation. It is no less reasonable to read sentence 3 as counting only the marginal emissions from modifications to pre-1975 sources. Pre-1975 emissions remain in the baseline while emissions from post-1975 construction count toward a state's pollutant allowance. This is the interpretation that EPA has adopted. See 43 Fed. Reg. 26,388 at 26,400-01 (June 19, 1978); 75 Fed. Reg. 64,864 at 64,869 (Oct. 20, 2010). And "an agency's reasonable interpretation of ambiguous statutory language" carries the day. *EPA v. EME Homer City Generation, L.P.*, 134 S. Ct. 1584, 1603 (2014).

EPA's is a sensible interpretation as well. The Council's approach could produce two undesirable outcomes. Under one understanding of the Council's view, the 1975 baseline

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would keep changing as old plants become "new." Every time a company modified a pre-1975 plant, all of the emissions that formerly were part of the baseline would now have to be counted against a state's allowance. This would cause no end of trouble during the permitting process for all plants (and not only the pre-1975 plant with modifications), because the region's baseline would be changing. Unless what was removed from the baseline were added to the allowance, other businesses could find themselves with no allowance to draw on. The other understanding of the Council's view involves double counting a "new" source's emissions. Rather than moving all the pre-1975 emissions from the baseline, a modification could cause the pre-1975 emission to count against the state's allowance and remain in the baseline. While this sounds strange, it is consistent with the Council's position. Under either interpretation companies (and state regulators) would be inclined to reject physical or operational changes to pollution sources, even if those changes *reduced* pollution, lest all pre-1975 emissions count against the state's allowance. The EPA's approach avoids that result.

EPA presents a reasonable interpretation of an ambiguous statutory provision. The petition for review is

DENIED.

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No. 12-3388

**IN THE UNITED STATES COURT OF APPEALS
FOR THE SEVENTH CIRCUIT**

**CLEAN WATER ACTION COUNCIL OF NORTHEASTERN WISCONSIN, INC.,
et al.,**

Petitioner,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, et al.,

Respondents,

GEORGIA-PACIFIC CONSUMER PRODUCTS LP,

Intervenor.

**On Petition for Review of a Final Order of the Administrator of the United States
Environmental Protection Agency**

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GLOSSARY

CAA or Act	Clean Air Act, 42 U.S.C. §§ 7401-7671q
EAB	Environmental Appeals Board of U.S. EPA
EPA	United States Environmental Protection Agency, a federal agency
NAAQS	National Ambient Air Quality Standard
Order	Order Denying Petition for Objection to Permit (July 23, 2012)
PM	Particulate Matter
PSD	Prevention of Significant Deterioration, 42 U.S.C. §§ 7470-7492
RTC	Response to Comments
SIP	State Implementation Plan
Title V	42 U.S.C. §§ 7661-7661f

STATEMENT OF JURISDICTION

This Court lacks jurisdiction. The Statement of Jurisdiction offered by Petitioners Clean Water Action Council of Northeastern Wisconsin, Inc. and Midwest Environmental Defense Center, Inc. ("Petitioners") is not correct. Petitioners nominally seek review of the "Order Denying Petition for Objection to Permit" ("Order") issued by Respondent United States Environmental Protection Agency ("EPA"), on July 23, 2012. Joint Appendix ("JA") __. *See* 77 Fed. Reg. 50,504 (Aug. 21, 2012) (giving notice of the Order). The Order was issued pursuant to EPA's authority under section 505(b)(2) of the Clean Air Act ("CAA" or "the Act"), 42 U.S.C. § 7661d(b)(2). Order at 3 [JA __]. However, the sole *issue* presented for review by Petitioners in fact challenges final action taken by EPA long ago. *See infra* Argument I.A. Specifically, Petitioners claim that EPA's interpretation of certain requirements specified in CAA section 169(4), 42 U.S.C. § 7479(4), is unlawful. At base, this claim challenges EPA rulemakings interpreting this statutory provision that were promulgated in 1978, 1980, 2002, and 2010. Because Petitioners failed to challenge these actions in the proper forum (the D.C. Circuit) within 60 days of their publication in the Federal Register, their only claim is time-barred under CAA section 307(b)(1), 42 U.S.C. § 7607(b)(1), and this Court lacks jurisdiction to hear it.

STATEMENT OF THE ISSUES

1. Whether this Court has jurisdiction to hear this petition for review when the Clean Air Act provides only 60 days for review of agency rulemakings; the petition challenges nationally applicable rulemakings promulgated in 1978, 1980, 2002, and 2010; and the arguments made by Petitioners now are purely legal arguments that were equally available when those actions became final.
2. If the petition for review is not time-barred, whether EPA reasonably concluded Petitioners had not “demonstrated,” within the meaning of section 505(b)(2) of the Act, 42 U.S.C. § 7661d(b)(2), that Georgia Pacific’s Title V permit was inconsistent with any requirement of the Act, because Petitioners did not demonstrate any error in EPA’s reasonable interpretation of the ambiguous language in section 169(4) of the Act, 42 U.S.C. § 7479(4), or in EPA and Wisconsin’s reasonable interpretation of federal and state regulations implementing that section.

STATEMENT OF THE CASE

This case involves a Clean Air Act Title V operating permit for the Georgia Pacific Consumer Products LP Plant (“Georgia Pacific”), a paper products manufacturing facility in Green Bay, Wisconsin. Title V of the CAA requires a “major [stationary] source” of air pollutants to secure an operating permit, *see* 42 U.S.C. § 7661a(a), which must contain such conditions as necessary to assure compliance with the applicable requirements of the Act. *Id.* § 7661c(a). Such applicable requirements include a major source’s obligation to obtain a prevention of significant deterioration (“PSD”) permit prior to starting construction of a new source or of a “major modification” at an existing source in an area that is subject to the PSD program. 40 C.F.R. § 70.2.

Among other applicable requirements, a PSD permit must ensure that emissions of pollutants from such sources do not result in violations of PSD “increments,” which specify the maximum allowable increase in the concentration of an air pollutant that may occur above a defined baseline concentration. Changes in emissions in an area, such as increases in emissions because a new source is built or an existing source is modified in an area subject to PSD, “consume” increment. If the available increment is not sufficient to permit the increase in emissions, a new or modified source cannot be constructed.

In Wisconsin, Title V operating permits are issued by the Wisconsin Department of Natural Resources (“Wisconsin”), but the Act authorizes EPA to review and object to any permit. 42 U.S.C. § 7661d. If the Administrator of EPA

does not object to a proposed Title V permit, any person may petition the Administrator to object to the proposed permit, and the Administrator must issue an objection *if* the petitioner “demonstrates to the Administrator” that the permit is not in compliance with the requirements of the Act. *Id.* § 7661d(b)(2).

In 2011, the Sierra Club,¹ the Clean Water Action Council of Northeastern Wisconsin, Inc. and the Midwest Environmental Defense Center, Inc. petitioned EPA to object to the Title V permit Wisconsin issued to Georgia Pacific (the “Petition to Object”). Petition to Object at 1 [JA ____]. Although Petitioners presented many arguments as bases for EPA to object to the Title V permit, only one of the issues raised before the Agency is presented in the instant petition for review. That single issue is Petitioners’ allegation that EPA misinterprets section 169(4) of the Act, 42 U.S.C. § 7479(4), and the Wisconsin State Implementation Plan (“SIP”) (and implicitly, EPA’s longstanding regulations implementing section 169(4), on which Wisconsin’s SIP is based), regarding the emissions from a modified source that should be considered to consume PSD increment. *Id.* at 59-63 [JA ____].

On July 23, 2012, EPA denied the Petition to Object, finding in relevant part that Petitioners had failed to demonstrate any error in Wisconsin’s interpretation of its SIP or a 2009 EPA adjudication confirming that EPA has long applied the same interpretation to substantively identical federal regulations. Order at 21 [JA ____]. Petitioners subsequently filed this petition challenging EPA’s denial. While Petitioners contend that this is an as-applied challenge based on EPA’s failure to

¹ The Sierra Club is not a party to this petition for review.

correct Wisconsin's error in applying the Act, *see* Pet. Br. at 5, this petition is in fact a facial attack on long-standing, nationally applicable EPA rulemaking actions first finalized decades ago. The Act, however, requires that such challenges be brought in the D.C. Circuit within 60 days of such rules' promulgation. Accordingly, this Court lacks jurisdiction to consider the petition for review. Even if this Court did have jurisdiction, Petitioners' statutory interpretation argument is without merit, and EPA reasonably determined that Petitioners failed to demonstrate that the Title V permit issued by Wisconsin was not in compliance with the Act.

STATEMENT OF FACTS

I. Statutory Background

A. State Implementation Plans

The CAA, 42 U.S.C. §§ 7401-7671q, enacted in 1970 and extensively amended in 1977 and 1990, establishes a comprehensive program for improving the nation's air quality through state and federal regulation. *Gen. Motors Corp. v. United States*, 496 U.S. 530, 532 (1990) (“the States and the Federal Government [are] partners in the struggle against air pollution.”). Under Title I of the Act, EPA is charged with identifying air pollutants that endanger the public health and welfare, and with formulating the National Ambient Air Quality Standards (“NAAQS” or “standards”) that specify the maximum permissible concentrations of those pollutants in the ambient air. 42 U.S.C. §§ 7408-09. EPA has established NAAQS for six “criteria” air pollutants: sulfur dioxide, particulate matter,² carbon monoxide, ozone, nitrogen dioxide, and lead.

Under the Act, each State must prepare a state implementation plan, or “SIP,” that provides for the implementation, maintenance and enforcement of the NAAQS in each air quality control region within the State. *Id.*; 42 U.S.C. § 7410(a)(1)-(2). The SIP must be adopted by the State after reasonable notice and a public hearing and be submitted to EPA for review and approval. *Id.* § 7410(a)(1); *see Train v. Natural Res. Def. Council, Inc.*, 421 U.S. 60, 66-67 (1975). EPA must

² Particulate matter is regulated via standards for two different indicators: particulate matter under ten microns in diameter (“PM₁₀”) and under two-and-one-half microns in diameter (“PM_{2.5}”). Unless otherwise specified, all references to particulate matter or PM herein should be understood to mean PM₁₀.

approve the SIP if it meets all of the applicable requirements of the Act. 42 U.S.C. § 7410(k)(3). The Act specifies minimum elements that States must include in their SIPs. *Id.* § 7410(a)(2). One such element is a Prevention of Significant Deterioration permitting program as required in Part C of Title I of the Act. *Id.* § 7410(a)(2)(C), (J).

B. Prevention of Significant Deterioration

The purpose of the PSD program is to protect the public health and welfare from adverse effects of air pollution by ensuring that increased air pollution permitted in areas attaining the NAAQS does not lead to significant deterioration of air quality in those areas, while at the same time ensuring that economic growth will occur in a manner consistent with the preservation of clean air resources. 42 U.S.C. § 7470. The PSD provisions set forth procedures and requirements for preconstruction review and permitting of new or modified sources of air pollution that plan to locate in areas that are classified as “attainment” or “unclassifiable” with respect to a particular NAAQS. *See generally id.* §§ 7470-7479.³ The permitting requirements apply to construction of or at “major emitting facilities,” *i.e.*, sources that emit 250 tons per year (or 100 tons per year for certain source categories) of any air pollutant. *Id.* §§ 7475(a), 7479(1). The permitting requirements apply to construction of a new major source or the modification of an

³ An “attainment” area is one where the air quality meets the NAAQS for a pollutant; an “unclassifiable” area is one that cannot be classified as meeting or not meeting the NAAQS for a pollutant. 42 U.S.C. § 7407(d)(1)(A)(ii), (d)(1)(A)(iii); *see Alabama Power Co. v. Costle*, 636 F.2d 323, 368 (D.C. Cir. 1979); *see also* 45 Fed. Reg. 52,676, 52,677 (Aug. 7, 1980).

existing major source. *Id.* § 7479(2)(C) (defining “construction” to include “modification”). A “modification” refers to any physical change or change in the method of operation at an existing stationary source which increases the amount of any air pollutant emitted by the source or which results in the emission of any air pollutant not previously emitted. *Id.* § 7411(a)(4).

Under CAA section 165(a)(3), to obtain a PSD permit, a proposed facility or modification subject to PSD review must demonstrate that emissions from construction or operation of such new or modified facility “will not cause, or contribute to, air pollution in excess of any (A) maximum allowable increase or maximum allowable concentration for any pollutant in any area to which this part applies more than one time per year, [or] (B) national ambient air quality standard in any air quality control region.” *Id.* § 7475(a)(3). The “maximum allowable increase” of an air pollutant that may occur above a defined baseline concentration is known as the PSD “increment.” 75 Fed. Reg. 64,864, 64,868 (Oct. 20, 2010) [JA __]; 72 Fed. Reg. 54,112, 54,116 (Sept. 21, 2007) [JA __]; *see* 42 U.S.C. § 7473; 40 C.F.R. § 52.21(c). Increments ensure that aggregate permitted pollution increases in attainment and unclassifiable areas do not cause significant deterioration of air quality in those areas. *See, e.g.*, 75 Fed. Reg. at 64,865 [JA __]; *see also In re N. Mich. Univ. Ripley Heating Plant*, PSD Appeal No. 08-02, slip. op. at 36-37, 2009 WL 443976 (EAB Feb. 18, 2009) (hereinafter “*In re N. Mich.*”) [JA __]. Relevant here, the Act establishes increments for sulfur dioxide and particulate matter, measured as a concentration of a pollutant in the ambient air (micrograms per cubic

meter). 42 U.S.C. § 7473. When a new source is built, emissions increase; when an existing source undergoes construction, emissions can either increase or decrease. Increases in emissions are said to “consume” increment, while conversely, decreases in emissions can “expand” available increment.

For purposes of determining whether emissions from a proposed facility will cause or contribute to an exceedance of either an increment or a NAAQS, section 165(e) requires the permitting authority or the owner or operator of the proposed facility to conduct an ambient air quality analysis. 42 U.S.C. § 7475(e)(1), (2). Accordingly, EPA regulations require a source impact analysis, which is primarily a modeling analysis designed to determine whether the allowable emissions increase from the proposed source, in conjunction with other emissions increases from existing sources, will cause or contribute to a violation of either a NAAQS or an increment. 40 C.F.R. § 51.166(k)-(m); 40 C.F.R. § 52.21(k)-(m). This analysis utilizes a combination of ambient air quality monitoring data and sophisticated air quality modeling to analyze how existing air quality would be affected by the proposed source. *See* 75 Fed. Reg. at 64,866 [JA __]; *see also* 40 C.F.R. Part 51, App. W (“Guideline on Air Quality Models”).

As noted above, the Act requires the States to implement PSD permitting programs in their SIPs. *See* 42 U.S.C. § 7410(a)(2)(C), (J). One of EPA’s PSD regulations specifics the minimum requirements that must be met to obtain EPA approval of state PSD permitting programs in a SIP. 40 C.F.R. § 51.166. A

separate, but nearly identical, regulation enables EPA to issue PSD permits in the absence of an approved state program. *Id.* § 52.21(a).

Wisconsin's SIP includes a PSD permitting program that has been approved by EPA as meeting the requirements of EPA's regulations and the Act. 64 Fed. Reg. 28,745 (May 27, 1999). The requirements of Wisconsin's PSD program and any terms and conditions of PSD permits issued by Wisconsin are applicable requirements for purposes of Wisconsin's Title V permits. 42 U.S.C. § 7661c(a); 40 C.F.R. § 70.2 (subparts (1) and (2) of the definition of "applicable requirement").

C. Title V

In 1990, Congress enacted Title V of the CAA, 42 U.S.C. §§ 7661-61f, establishing a permit program covering the operations of stationary sources of air pollution. Congress designed the Title V permit program to be administered and enforced primarily by state and local air permitting authorities pursuant to EPA-approved permit programs and subject to EPA oversight. *See* 42 U.S.C. §§ 7661a(d)(1), 7661a(i), 7661d. Each State must develop and submit to EPA a permit program meeting the requirements of Title V and the applicable regulations promulgated by EPA. *Id.*; 42 U.S.C. §§ 7661a(b), (d); 40 C.F.R. Part 70, State Operating Permit Programs. EPA has granted most States, including Wisconsin, approval to administer the Title V permit program. 40 C.F.R. Part 70, App. A; 66 Fed. Reg. 62,946 (Dec. 4, 2001) (granting final, full approval of Wisconsin's Title V program).

Under the Title V program, all CAA requirements applicable to a particular source must be set forth in a comprehensive permit, often called a Title V permit or an operating permit, which serves as “a source-specific bible for Clean Air Act compliance.” *Virginia v. EPA*, 80 F.3d 869, 873 (4th Cir. 1996). Sources of air pollution subject to Title V are required to apply for, and operate pursuant to, an operating permit that includes emission limitations, standards, monitoring requirements, compliance schedules, and other conditions as necessary to assure compliance with applicable requirements of the CAA, including the requirements of the applicable state implementation plan. *See* 42 U.S.C. §§ 7661a(a), 7661c(a).

For areas such as Green Bay, the applicable requirements under Title V include compliance with the requirements of the PSD program when that program applies. 42 U.S.C. §§ 7475(a)(1), 7661c(a); *see also* 40 C.F.R. § 70.2 (defining “applicable requirements” for state operating permit programs to include requirements of both implementation plans, and the terms and conditions of preconstruction permits, such as PSD permits, issued under Title I of the Act).

D. EPA Review of Title V Permits

Title V of the CAA and the applicable EPA regulations require state permitting authorities to submit all proposed Title V permits to EPA for review. 42 U.S.C. § 7661d(a)(1); 40 C.F.R. § 70.8(a)(1). Title V calls for EPA, within 45 days of receipt of a proposed Title V permit, to object to that permit on its own initiative if EPA “determine[s]” that the proposed permit “contains provisions that are . . . not in compliance” with “applicable requirements of [the Act], including the

requirements of the applicable implementation plan.” 42 U.S.C. § 7661d(b)(1); *see* 40 C.F.R. § 70.8(c). If EPA does not object on its own, “any person may petition the Administrator” to do so within 60 days after the expiration of the 45-day period. 42 U.S.C. § 7661d(b)(2); *see also* 40 C.F.R. § 70.8(d). Section 505(b)(2) provides that “[t]he Administrator shall issue an objection . . . if the petitioner *demonstrates* to the Administrator that the permit is not in compliance with the requirements of [the CAA], including the requirements of the applicable implementation plan.” 42 U.S.C. § 7661d(b)(2) (emphasis added); *see also* 40 C.F.R. § 70.8(d). Critically, the statute states that “[t]he Administrator shall grant or deny such petition within 60 days after the petition is filed.” 42 U.S.C. § 7661d(b)(2).

EPA interprets the “demonstration” requirement in section 505(b)(2) as placing the burden on the person seeking the objection to supply information to EPA “sufficient to demonstrate the validity of each objection raised” to the Title V permit. EPA Order at 10 [JA ____]. One critical reason for this is that section 505(b)(2) allows EPA *only 60 days* in which to investigate, analyze, and rule on a petition such as that submitted by Petitioners here. As this Court noted in *Citizens Against Ruining the Environment v. EPA*,

Congress deliberately gave the EPA a rather short time period to review proposed permits, resolve questions related to those permits, and decide whether to object. Because this limited time frame may not allow the EPA to fully investigate and analyze contested allegations, it is reasonable in this context for the EPA to refrain from extensive fact-finding.

535 F.3d 670, 678 (7th Cir. 2008).

In determining whether to object, EPA considers whether the information a petitioner presents demonstrates the applicability of a CAA requirement; in this regard, a failure by petitioners to address a key component of an applicability analysis can be fatal. Order at 3, 11 [JA ____]. EPA considers numerous other factors as well, such as the quality of information presented, underlying disputes, and pending enforcement actions. *See Sierra Club v. EPA*, 557 F.3d 401, 406-07 (6th Cir. 2009); *see also Citizens Against Ruining the Environment*, 535 F.3d at 679 (where “there is contested evidence of a potential violation requiring further investigation and analysis” it was reasonable for EPA to determine that a demonstration had not been made). Generally, if petitioners do not present information concerning relevant factors, then EPA may find that the petitioner has failed to satisfy the “demonstration” requirement. *See, e.g.*, Order at 11, 13-14 [JA ____].

E. Judicial Review

Section 307(b)(1) permits judicial review of certain specified actions of EPA taken pursuant to the Act, as well as of “any other nationally applicable regulations promulgated, or final action taken, by the Administrator” under the Act, but only in the United States Court of Appeals for the District of Columbia. 42 U.S.C. § 7607(b)(1). Section 307(b)(1) further provides that a petition for review of a final action by EPA under the CAA that is locally applicable, such as a denial of a petition to object to a Title V permit, may be filed in the United States Court of Appeals for the appropriate circuit. *Id.* Whether nationally or locally applicable,

petitions for review must be filed within 60 days from the date of publication in the Federal Register of notice of the final action. *Id.*

II. EPA's Implementation of the PSD Program

A. *Baseline Concentrations, Baseline Dates and Increment Consumption*

As noted earlier, a PSD increment is a maximum allowable increase of emissions of a pollutant in an area above a specified baseline concentration for that pollutant in that area. In section 169(4) of the Act, 42 U.S.C. § 7479(4), Congress established a formula to define the term "baseline concentration." The first sentence of section 169(4) specifies that the baseline concentration for a particular pollutant is the ambient concentration level of that pollutant in a certain area, referred to as the "baseline area,"⁴ that existed when the first PSD permit application addressing that pollutant was submitted by a source seeking to construct in that area. 42 U.S.C. § 7479(4); Order at 17 [JA ____]. In the second sentence, Congress directed that the baseline concentration *include* projected emissions from major sources which commenced construction prior to January 6, 1975, but which had not begun operation when the baseline concentration was determined, *i.e.*, the date on which the first PSD permit application was submitted. 42 U.S.C. § 7479(4).

In the third and last sentence of section 169(4), Congress specified the exception at the heart of this petition for review:

Emissions of sulfur oxides and particulate matter from any major emitting facility on which construction commenced *after* January 6, 1975, *shall be not included* in the baseline and shall be counted against

⁴ See 40 C.F.R. §§ 51.166(b)(15)(i) and 52.21(b)(15)(i) (defining "baseline area").

the maximum allowable increases in pollutant concentrations [*i.e.*, PSD increment] established under this part.

Id. (emphasis added). In sum, in this third sentence Congress required that emissions of sulfur oxides and particulate matter from major sources commencing construction *after* January 6, 1975, consume increment, and excluded such emissions from baseline concentrations.⁵ *Id.* The result of this exception is that all emissions from all other sources prior to submission of the first PSD permit application for an area are included in the baseline concentration.

By establishing a formula to define baseline concentration, Congress established certain parameters that govern which emissions are included in the baseline concentration and which, instead, consume increment. As EPA explained in the Order, to implement these congressionally-specified parameters and further define which specific emissions consume increment (as opposed to being included in the baseline concentration), EPA established regulatory definitions for three distinct dates: the “major source baseline date,” the “trigger date,” and the “minor source baseline date.” Order at 17-18 [JA ___]; *see* 53 Fed. Reg. 40,656, 40,658, 40,670 (Oct. 17, 1988); *see also* New Source Review Workshop Manual, Prevention

⁵ Congress chose January 6, 1975, because that was the effective date of EPA’s initial PSD regulations, which were subsequently added to the statute (with revisions) by Congress as Part C in the 1977 CAA amendments. 39 Fed. Reg. 42,510, 42,514 (Dec. 5, 1974).

of Significant Deterioration and Nonattainment Area Permitting, at C.6 (Draft Oct. 1990) (hereinafter “NSR Manual”) (JA ____).⁶

The “major source baseline date” is pollutant-specific and defined by federal regulations codified at 40 C.F.R. §§ 51.166(b)(14)(i) and 52.21(b)(14)(i). For particulate matter and sulfur oxides, the major source baseline date is January 6, 1975, consistent with section 169(4). *Id.* Thus, for major sources the construction or modification of which commences *after* the major source baseline date of January 6, 1975, increases in actual emissions⁷ of particulate matter and sulfur oxides consume increment.

The “trigger date” and related “minor source baseline date” are defined by federal regulations codified at 40 C.F.R. §§ 51.166(b)(14)(ii) and 52.21(b)(14)(ii). The trigger date sets the point in time after which new or modified sources have to begin performing an increment analysis for a particular pollutant as part of the PSD permitting process. *See* 75 Fed. Reg. at 64,868. “The minor source baseline date is ‘the earliest date after the trigger date on which a major stationary source or a major modification’” submits a complete PSD application addressing that pollutant

⁶ This document is referenced in the Guideline on Air Quality Models. 40 C.F.R. Part 51, App. W, Preface n.2. EPA developed the NSR Manual for use in conjunction with New Source Review workshops and training, as guidance for permitting authorities to be used in implementing the PSD requirements of the New Source Review Program. *See id.* (Preface). This draft EPA training manual, which compiled recommendations from several EPA guidance memoranda, is frequently cited in decisions of the Environmental Appeals Board. *Available at* <http://www.epa.gov/nsr/ttnnsr01/gen/wkshpman.pdf> (last visited Apr. 5, 2013).

⁷ “Actual emissions” is defined, with multiple variations, in EPA’s regulations and the Wisconsin SIP. *See* Pet. Br. at 10-11; 40 C.F.R. §§ 51.166(b)(21) and 52.21(b)(21). The specific application of this term is not relevant to this petition.

in a particular baseline area. Order at 18 [JA ___], quoting 40 C.F.R. §§ 51.166(b)(14)(ii) and 52.21(b)(14)(ii).

Finally, EPA regulations define the “baseline concentration” as the “ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date.” Order at 18 [JA ___], quoting 40 C.F.R. §§ 51.166(b)(13)(i) and 52.21(b)(13)(i). EPA’s regulations also explain which emissions are excluded from the baseline concentration: “Actual emissions...from any major stationary source on which construction commenced *after* the major source baseline date.” 40 C.F.R. §§ 51.166(b)(13)(ii)(a) and 52.21(b)(13)(ii)(a) (emphasis added).⁸

To illustrate using the example of particulate matter, the major source baseline date for particulate matter is defined by Congress as January 6, 1975. The trigger date is August 7, 1977, the date of the 1977 amendments to the Act, when the original statutory increments were established. The minor source baseline date for particulate matter in the applicable baseline area is the first day after August 7, 1977, on which a complete PSD application addressing particulate matter was received by the appropriate permitting agency for that area. Generally, actual emissions of particulate matter from all sources in existence in the baseline area *on the minor source baseline date* (which is area- and pollutant-specific) are included in the baseline concentration for that area. 40 C.F.R. §§ 51.166(b)(13)(i)(a) and

⁸ The regulations further excluded from the baseline concentration “[a]ctual emissions increases and decreases...at any stationary source occurring after the minor source baseline date.” 40 C.F.R. §§ 51.166(b)(13)(ii)(b) and 52.21(b)(13)(ii)(b). The Wisconsin SIP includes a substantively identical definition of “baseline concentration.” See Wis. Admin. Code NR § 405.02(4) (2004).

52.21(b)(14)(i)(a). However, as Congress directed in section 169(4), emissions of particulate matter from any major stationary source on which construction commenced *after* January 6, 1975, are not included in the baseline concentration but consume increment instead. 42 U.S.C. § 7479(4); 40 C.F.R. §§ 51.166(b)(13)(ii)(a) and 52.21(b)(14)(ii)(a).

Here, Georgia Pacific is a major stationary source that originally commenced construction *prior* to January 6, 1975, and its initial (pre-modification) emissions are thus included in the baseline concentration and do not consume increment. In 2004, Georgia Pacific underwent a modification, and any resulting *increase* in emissions since the major source baseline date *as a result of the modification* consumes increment. 40 C.F.R. §§ 51.166(b)(13)(ii)(a) and 52.21(b)(14)(ii)(a); Order at 17-18, 21 [JA __]; *In re N. Mich.* at 46 [JA __].

B. The 1978 Rules

EPA issued two rules implementing the PSD program in 1978. While they were substantially the same, one concerned the issuance of PSD permits by EPA (43 Fed. Reg. 26,388 (June 19, 1978) [JA __]), while the other (43 Fed. Reg. 26,380 (June 19, 1978) [JA __]) addressed the requirements for PSD permitting programs in state implementation plans. Of particular relevance to this matter, EPA provided in both rulemakings that its approach to increment consumption would be driven by tracking emission *changes*. *See, e.g.*, 43 Fed. Reg. at 26,400-01 [JA __] (“Increases in the baseline emission of sources contributing to the baseline concentration will also

consume increment.... Conversely, reductions in the baseline emissions of sources existing in 1977 generally expand the available PSD increment(s).”)

C. The 1980 Rule

The 1978 rules were challenged in *Alabama Power Co. v. Costle*, 636 F.2d 323 (D.C. Cir. 1979). Largely in response to the *Alabama Power* ruling, EPA promulgated a rule in 1980 maintaining some parts and revising other parts of the PSD program, in accordance with the D.C. Circuit’s decision. 45 Fed. Reg. 52,676 (Aug. 7, 1980) [JA ____]. The 1980 rule first added the definition of “baseline concentration,” including the description of emissions excluded from the baseline.⁹ The 1980 rule consistently reaffirmed, in several contexts involving increment consumption, EPA’s approach of tracking *changes* in emissions in order to calculate available increment. For example, after noting that *Alabama Power* had not directly addressed “which source emissions consume increment” and “how to calculate the amount of increment consumed by those emissions,” EPA stated it was continuing with the approach it set forth in the 1978 rules. 45 Fed. Reg. at 52,717 [JA ____]. EPA stated that four categories of source emissions affect increment under that approach. *Id.* The second category is of particular relevance here: “(2) emissions *changes* occurring after the baseline date at sources whose previous emissions on the baseline date are included in the baseline concentrations.” *Id.* (emphasis added).

⁹ The definition of “baseline concentration” was modified in subsequent rulemakings to account for the development of increments for additional pollutants and to include a cross-reference to the definition of “actual emissions,” added in 2002. *See* 53 Fed. Reg. at 40,670; 67 Fed. Reg. 80,186, 80,261 (Dec. 31, 2002). For all other purposes, the regulation has remained unchanged since 1980.

EPA continued: “The second and fourth categories affect increment on the basis of actual emissions *changes* from the emissions included in the baseline concentration.” *Id.* (emphasis added); *see also id.* (“EPA has concluded that increment consumption and expansion should be based primarily on actual emissions increases and decreases.”). EPA also explained:

Any construction commencing at a major source since January 6, 1975, may result in an increase or decrease in actual source emissions. If an actual decrease involving construction at a major stationary source occurs before the [minor source] baseline date, the reduction will expand the available increment if it is included in a federally enforceable permit or SIP provision. *An actual increase associated with construction activities at a major stationary source will consume increment.*

Id. at 52,720 [JA __] (emphasis added).

This implementation of the Act is further illustrated by EPA’s instruction on how to calculate increment consumption, which includes analyzing “emissions *changes* that have occurred at baseline sources and emissions from *new* minor and area sources since the baseline date.” *Id.* at 52,718 [JA __] (emphases added); *see also* Order at 19 [JA __], quoting 45 Fed. Reg. at 52,717 (“increment consumption and expansion should be based primarily on actual emissions increases and decreases”).

D. The 2002 Rule

EPA also revised its PSD regulations in 2002. 67 Fed. Reg. 80,186 (Dec. 31, 2002) [JA __]. EPA stated in that rule that it was not changing the way a source’s ambient air quality impacts are evaluated. *Id.* at 80,202 [JA __]. Indeed, EPA stated: “[A]ny *increase* in actual emissions, based on the existing definition of

'actual emissions,' consumes PSD increment whether it occurs through normal source operation or as a result of a physical or operational change." *Id.* (emphasis added).

E. The 2010 Rule

In 2010, EPA promulgated a rule adopting, *inter alia*, increments for PM_{2.5}. 75 Fed. Reg. 64,864 (Oct. 20, 2010) [JA ____]. EPA reaffirmed its long-standing interpretation of the Act and its regulations, now applied to PM_{2.5}:

The inventory of increment-consuming emissions includes emissions from increment-affecting sources at two separate time periods—the baseline date and the current period of time. For each source that was in existence on the relevant baseline date (major source or minor source), the inventory includes the source's actual emissions on the baseline date and its current actual emissions. *The change in emissions over these time periods represents the emissions that consume increment* (or, if emissions have gone down, expand the available increment). For sources constructed since the relevant baseline date, *all* their current actual emissions consume increment and are included in the inventory.

Id. at 64,869 [JA ____] (emphasis added). Thus, like the 1978, 1980, and 2002 Rules before it, the 2010 Rule provided that *changes* in a baseline source's emission levels consume or expand increment (depending on whether the source's emissions increase or decrease), in contrast to new sources constructed after the relevant baseline date, the entirety of whose emissions *consume* increment.

Until now, no one has ever challenged this aspect of the 1978-2010 rules.

III. Factual and Procedural Background

A. Georgia Pacific's Title V Permit

Georgia Pacific manufactures sanitary paper products. Order at 3 [JA ____].

The facility utilizes several coal-fired boilers, as well as boilers that burn petroleum

coke, No. 2 fuel oil, and natural gas. *Id.* at 3-4 [JA ____]. Wisconsin issued Georgia Pacific's original Title V operating permit on November 13, 1998. *Id.* at 4 [JA ____]. Georgia Pacific submitted a timely Title V renewal application to Wisconsin on November 20, 2002. *Id.* In 2005, Wisconsin took public comment on the draft permit and subsequently revised the draft permit significantly, such that Wisconsin took public comment on the revised draft permit in 2010. *Id.* Certain of Petitioners here submitted comments to the State on April 19, 2010, raising multiple concerns regarding a PSD permit Wisconsin issued to Georgia Pacific for a modification to the facility. Comments at 6-7 [JA ____]. As relevant to this case, the commenters alleged that Georgia Pacific underwent a major modification in 2004, and that the PSD permit issued by Wisconsin did not properly calculate the amount of increment consumed as a result of that modification. *Id.* On May 10, 2011, Wisconsin issued its response to comments ("RTC"). [JA ____]. Wisconsin articulated the same interpretation of "baseline concentration" as defined in the Wisconsin SIP as EPA interprets the substantively identical definition in its regulations. RTC at 7 [JA ____]. Wisconsin's response relied on the reasoning of a decision by EPA's Environmental Appeals Board ("EAB")¹⁰ that rejected, in the context of a PSD permit issued by EPA, the same arguments made by Petitioners here. *Id.*

As required by law, Wisconsin submitted the proposed permit to EPA on May 23, 2011. EPA did not object to the proposed final permit within the Agency's 45-day

¹⁰ The EAB is an administrative tribunal created on March 1, 1992. *See* 57 Fed. Reg. 5320 (Feb. 13, 1992). It is the final agency decisionmaker on administrative appeals of EPA permitting decisions under major environmental statutes that EPA administers. *See* 40 C.F.R. §§ 1.25(e), 124.2.

review period, and Wisconsin therefore issued the final permit on July 26, 2011. Order at 4 [JA ____]. On July 23, 2011, Petitioners submitted a petition to EPA requesting that EPA object to the issuance of the permit, pursuant to section 505(b)(2) of the CAA, 42 U.S.C. § 7661d(b)(2). *Id.* Petitioners raised three principal grounds for objecting to the permit. Among the issues raised were that Wisconsin's interpretation of applicable regulations (which tracked EPA's longstanding interpretation)—that only *increases* in emissions from modifications occurring after the major source baseline date consume increment—is wrong. Order at 14-15 [JA ____]; Petition to Object at 59-60 [JA ____].

B. EPA's Order

EPA considered the issues raised in the Petition to Object, and on July 23, 2012, issued an Order denying the Petition to Object. Order at 2 [JA ____]. With respect to the issue presented in this petition for review, EPA noted that the applicable PSD regulations in the Wisconsin SIP were the same as EPA's federal regulations, Order at 14 [JA ____], and that Wisconsin had articulated the same interpretation of its regulations as EPA has applied since 1978. *Id.* at 17 [JA ____]. Further, the Order observed that the EAB had, in a "well-reasoned decision," recently and thoroughly considered and rejected the same arguments Petitioners raised before the Agency. *Id.* at 21 [JA ____]. EPA thus found that Petitioners had not demonstrated error in Wisconsin's permitting decision or that EPA should revisit

EPA's longstanding interpretation of the Act and federal PSD regulations that Wisconsin referenced to support its decision. Order at 21 [JA ____].¹¹

Notice of EPA's Order appeared in the Federal Register on August 21, 2012. 77 Fed. Reg. 50,504. Petitioners then filed their judicial petition for review in this Court challenging the Order within the time authorized by 42 U.S.C. § 7607(b)(1), although as discussed *infra*, the Court lacks jurisdiction to consider the single issue raised by this petition for review, because that issue actually constitutes a challenge to EPA's longstanding regulations.

¹¹ The Petition to Object raised, and EPA's Order addressed and denied, other issues relating to the 2004 modification and the PSD permit issued to Georgia Pacific. Order at 14-21 [JA ____]. Petitioners have not sought review of these issues.

STANDARD OF REVIEW

The determination of jurisdiction is a “threshold issue”: if subject matter jurisdiction does not exist, “the court cannot proceed at all in any cause.” *Steel Co. v. Citizens for a Better Env’t*, 523 U.S. 83, 94 (1998) (citation omitted). Petitioner bears the burden of demonstrating subject matter jurisdiction. *See Kokkonen v. Guardian Life Ins. Co. of Am.*, 511 U.S. 375, 377 (1994). Here, section 307(b)(1) of the Act, 42 U.S.C. § 7607(b)(1), requires that petitions for review of final EPA action be filed within 60 days of Federal Register publication of notice of their promulgation. Suits brought outside that time frame generally may not be entertained.

On the merits, because the CAA sets forth no independent standard of review applicable to this case, this Court must review the EPA’s actions pursuant to the Administrative Procedure Act (“APA”), which contemplates setting aside only agency actions that are “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A).

Questions of statutory interpretation are governed by the two-step test set forth in *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837, 842-43 (1984). Under “*Chevron* Step One,” the Court must determine “whether Congress has directly spoken to the precise question at issue.” *Id.* at 842. If Congress’ intent is clear from the statutory language, the Court must “give effect to the unambiguously expressed intent of Congress.” *Id.* at 842-43. If, however, the statute is “silent or ambiguous with respect to the specific issue,” the Court proceeds

to “*Chevron* Step Two” and must decide whether the Agency’s interpretation is based on a permissible construction of the statute. *Id.* at 843.

Under *Chevron* Step Two, the Court “need not conclude that the agency construction was the only one it permissibly could have adopted or even that [the Court] would have interpreted the statute the same way that the agency did.” *Sierra Club v. Johnson*, 436 F.3d 1269, 1274 (11th Cir. 2006) (quoting *Chevron*, 467 U.S. at 843 n.11). *See also Ali v. Achim*, 468 F.3d 462, 468 (7th Cir. 2006); *Nat’l Cable & Telecomms. Ass’n v. Brand X Servs.*, 545 U.S. 967, 980 (2005) (courts must accept an agency’s reasonable interpretation of an ambiguous statute “even if the agency’s reading differs from what the court believes is the best statutory interpretation”) (*citing Chevron*, 467 U.S. at 843-44 & n.11). Rather, as this Court has outlined, “Courts have generally accorded substantial deference to the EPA’s interpretation of the Clean Air Act Amendments, reasoning that ‘considerable weight should be accorded to an executive department’s construction of a statutory scheme it is entrusted to administer....’” *Wisconsin Elec. Power Co. v. Reilly*, 893 F.2d 901, 906 (7th Cir. 1990) (quoting *Chevron*, 467 U.S. at 844). *See also Illinois EPA v. U.S. EPA*, 947 F.2d 283, 289 (7th Cir. 1991). This deference “follows logically from the highly technical provisions of the Amendments ... and is consistent with the Administrative Procedure Act, which provides that agency actions are to be set aside only if they are ‘arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.’ 5 U.S.C. § 706(2).” *Wisconsin Elec.*, 893 F.2d at 906-07 (internal citations omitted).

To prevail under this deferential standard, parties challenging final agency action under the APA must show that the agency “relied on factors which Congress had not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983); *see also id.* (the “scope of review under the ‘arbitrary and capricious’ standard is narrow and a court is not to substitute its judgment for that of the agency.”). Even a decision of “less than ideal clarity” should be upheld so long as “the agency’s path may reasonably be discerned.” *National Ass’n of Home Builders v. Defenders of Wildlife*, 551 U.S. 644, 658 (2007) (citations and internal quotation marks omitted).

Further, EPA’s interpretation of its own regulations is entitled to the highest level of deference: it is to be given “controlling” weight unless “plainly erroneous or inconsistent with the regulation.” *Auer v. Robbins*, 519 U.S. 452, 461 (1997) (citation omitted).¹² This is particularly true with respect to “technical and complex” matters arising under those regulations. *Wisconsin Elec.*, 893 F.2d at 910 (considering CAA new source review requirements). As the Supreme Court has explained, “[w]here ... an agency’s course of action indicates that the interpretation of its own regulation reflects its considered views ... we have accepted that

¹² Petitioners rely in error on *Marlowe v. Bottarelli*, 938 F.2d 807 (7th Cir. 1991), which preceded *Auer*, for the proposition that the Court employs a *Chevron*-style two-step deference to an agency’s interpretations of its own regulations. *See* Pet. Br. at 21.

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interpretation as the agency's own, even if the agency set those views forth in a legal brief." *Long Island Care at Home, Ltd. v. Coke*, 551 U.S. 158, 171 (2007) (citing *Auer*, 519 U.S. at 462).

SUMMARY OF THE ARGUMENT

Although couched as an as-applied challenge to Wisconsin's application of its state implementation plan to Georgia Pacific's Title V permit, this petition for review in fact presents a facial attack on various EPA rulemakings implementing the 1977 Amendments to the Clean Air Act. In those Amendments, Congress established definitions for the PSD program, including defining "construction" to include "modifications," as well as a formula for calculating a "baseline concentration" for sulfur oxides or particulate matter in any air quality area subject to the PSD program. The formula results in the *inclusion* in the baseline concentration of emissions from any major source that initially commenced construction *before* January 6, 1975—what EPA has called the "major source baseline date." Congress also specifically *excluded* from the baseline concentration emissions from major sources that commenced construction *after* the major source baseline date.

Congress left unanswered the question at issue here: what portion, if any, of the emissions from a major source *built prior to January 6, 1975, but modified later*, consume increment and what portion is reflected in the baseline concentration? By leaving this gap, Congress vested EPA with the authority to interpret and implement the statute. EPA did so via rulemakings in 1978 and 1980, specifying that *increases* in emissions from a modification of a source built prior to January 6, 1975, but modified after that date, consume increment, while the rest of that major source's emissions remain in the baseline concentration. Petitioners incorrectly

contend that EPA's interpretation is foreclosed by the plain meaning of section 169(4) of the Act, 42 U.S.C. § 7479(4).

This Court lacks jurisdiction to consider this issue—the sole issue raised in this case—because it is, at core, an untimely challenge to final actions taken by EPA in 1978 and 1980. EPA reaffirmed its interpretation of the Act and its regulations in rulemakings in 2002 and as recently as 2010. Section 307(b)(1), 42 U.S.C. § 7607(b)(1) provides that a petition for review of nationally applicable rulemakings such as those at issue here must be filed within 60 days of publication in the Federal Register, and only in the United States Court of Appeals for the District of Columbia Circuit. Petitioners here present purely legal arguments that could and should have been raised at the time EPA published its rulemakings in 1978, 1980, 2002, or 2010. Because the time to challenge these actions has long since passed, and because this Court is without jurisdiction to consider the validity of nationwide rules issued under the Clean Air Act in any event, the petition must be dismissed.

Even if this Court had jurisdiction, the language of section 169(4) supports EPA's interpretation, and not Petitioners'. Congress' formula defining a baseline concentration results in the inclusion in the baseline concentration for an area emissions from major sources built before January 6, 1975. Petitioners' interpretation of the statute—under which the *entirety* of every modified source's emissions (even a source built before January 6, 1975) consumes increment, and that none of those emissions remain in the baseline concentration—would

effectively read this provision out of the statute for any source that is later modified. EPA's interpretation, on the other hand, focuses on *changes* in emissions that result from later construction (including modifications), such that *changes* in emissions from post-January 6, 1975, construction (including modifications) either consume or expand increment. Accordingly, only *increases* in emissions from post-January 6, 1975, modifications consume increment, and the rest of the facility's emissions remain in the baseline concentration. EPA's interpretation is reasonable and thus entitled to deference.

EPA reasonably determined that Petitioners had not "demonstrated," within the meaning of section 505(b)(2), 42 U.S.C. § 7661d(b)(2), that Georgia Pacific's Title V permit is not in compliance with requirements of the Act, and that they had not presented a compelling basis for EPA to revisit its longstanding interpretation of the Act and EPA's implementing regulations. Accordingly, EPA reasonably denied the petition to object.

ARGUMENT

I. The Petition Is Time-Barred.

The Court should not reach the merits of Petitioners' purported challenge to the Order, because the sole issue they raise is in fact a challenge to EPA's interpretation of CAA section 169(4), 42 U.S.C. § 7479(4), as set forth in four longstanding rulemakings of nationwide applicability, promulgated in 1978, 1980, 2002 and 2010. The time to challenge those actions has long passed. The Act sets a strict time limit for challenging EPA rulemakings: 60 days from the date on which notice of their promulgation is published in the Federal Register. 42 U.S.C. § 7607(b)(1). This time limit "is jurisdictional in nature, and may not be enlarged or altered by the courts." *NRDC v. EPA*, 571 F.3d 1245, 1265 (D.C. Cir. 2009) (citation omitted). Thus, if the petitioners have failed to comply with it, the Court is "powerless to address their claim." *Medical Waste Inst. & Energy Recovery Council v. EPA*, 645 F.3d 420, 427 (D.C. Cir. 2011). Petitioners here failed to comply with this requirement with regard to their claim that EPA incorrectly interprets section 169(4) of the Act.

A. The 1978-2010 Rules Set Forth EPA's Reading of the Act, and the Arguments Made Here Could and Should Have Been Raised Then.

Petitioners contend that section 169(4), 42 U.S.C. § 7479(4), plainly *commands* that *all* emissions from any facility modified after January 6, 1975, consume increment, and no part of that facility's emissions can be attributable to baseline concentration, even if the facility was initially constructed *before* January 6, 1975. Pet. Br. at 22-25. Therefore, Petitioners' argue, EPA's interpretation of the

statute and the provisions of the Wisconsin SIP that are substantively identical to EPA's regulations implementing section 169(4), is foreclosed by the plain meaning of the statute. *Id.* at 22-25, 30-34. However, EPA's reading of the statute's PSD increment consumption provisions was clearly and unambiguously set forth in its 1978, 1980, 2002 and 2010 rules, and the legal arguments advanced by Petitioners here could and should have been presented at that time.

EPA's interpretation was first reflected in the 1978 rules, which consistently defined EPA's approach to increment consumption as driven by changes in emissions at a source: "The Administrator feels that increment consumption can best be tracked by tallying changes in the emission levels of sources contributing to the baseline concentration *and* increases in emissions due to new sources." 43 Fed. Reg. at 26,400 (emphasis added). EPA continued: "Thus, to implement the air quality increment approach set forth in the Act, the reviewing authority needs to verify that all *changes from baseline emission rates* (decreases or increases as appropriate) in conjunction with the increased emissions associated with approved new source construction will not violate an applicable increment of NAAQS." *Id.* (emphasis added). This is critical: EPA indicated that *changes* in emissions from sources contributing to the baseline concentration, such as those from the 2004 modification at Georgia Pacific at issue here, would consume increment, and separately, emissions from new sources would *also* consume increment. This is precisely the issue presented in the instant petition for review. *See* Pet. Br. at 22-25.

EPA also articulated its policy for using “actual emissions” to implement its approach to the baseline concentration, stating that this policy “is consistent with the intent of the Act to base increment consumption on all emission *increases* from new *and modified sources*, but to allow consumption of the increment to occur from only certain non-modification activities (e.g., some fuel-switches) of existing sources.” *Id.* (emphasis added). That EPA focused on emission *increases* is further exemplified by a list added to the PSD regulations of emissions activities—all attributable to emissions increases—that could be excluded from the increment consumption calculation upon a State’s request. *Id.* at 26,405; *see also* 40 C.F.R. § 51.166(f)(1) and 52.21(f)(1). Indeed, EPA’s regulations simply copied section 163(c), 42 U.S.C. § 7473(c), in which Congress (repeatedly) discussed “increase[s] in emissions.” 42 U.S.C. §§ 7473(c)(1)(A), (B), (C), (D).

Briefs submitted by industry petitioners challenging the 1978 rules in *Alabama Power* demonstrate that they understood that EPA would consider *increases* in emissions from pre-baseline date sources to consume increment. For example, the State of Texas expressed its understanding that “[a]llowable increments above the baseline would be consumed by increased emissions not included within the baseline.” Brief for Petitioners The State of Texas in No. 78-1825 and the District of Columbia in No. 78-1752, D.C. Circuit Nos. 78-1006 (and consolidated cases) (Mar. 15, 1979) at 16 [JA __] (hereinafter “Texas Brief”).

Texas was primarily concerned with the aspect of EPA’s 1978 rules stating that increased emissions resulting from a source switching its source fuels (*e.g.*,

from natural gas to oil) would consume increment. *Id.* at 2 [JA ____]. Specifically, the 1978 Rules exempted from increment consumption emissions increases resulting from federally-ordered fuel switching. *Id.* at 10-11, 13 [JA ____]; 43 Fed. Reg. at 26,405. Texas challenged the rules for not similarly exempting from increment consumption voluntary fuel switches or those ordered by a State. Texas Brief at 10-11, 13 [JA ____]. With respect to voluntary fuel switches, EPA determined that a major source constructed prior to January 6, 1975, designed to accommodate multiple fuels, would not need to obtain a PSD permit for a major modification if that source later switched fuels. *Id.* at 15 [JA ____]; 43 Fed. Reg. at 26,404 [JA ____].

However, as Texas wrote:

While such fuel switches were thus deemed to be exempt from PSD permitting, EPA indicated in the preamble to its PSD regulations that *increased* emissions from fuel switches would be counted against the allowable PSD increments where the switches occurred after the baseline determination date.

Texas Brief at 15, citing 43 Fed. Reg. at 26,400 (emphasis added).

The D.C. Circuit in *Alabama Power* described this issue as

whether *increased* emissions from a major facility's voluntary switch from a relatively clean but scarce fuel to a more abundant but dirtier fuel are to consume the increments or rather are to be included within the baseline when the facility was capable of utilizing the alternate, more plentiful fuel prior to January 6, 1975.

636 F.2d at 377 (emphasis added). The D.C. Circuit noted EPA's position that such fuel switches do not constitute major modifications, but that resulting increases in emissions do consume increment. *Id.* at 377-78 & n.29 (citing 43 Fed. Reg. at 26,397). The court affirmed EPA's regulations on this issue. 636 F.2d at 381. In a later discussion, the *Alabama Power* court reiterated this point: "[A]s we have

explained in our discussion of the fuel-switches issue...only the actual emissions of a major source operating on the date of the baseline determination and on which construction commenced prior to January 6, 1975, are grandfathered; *additional emissions from such a source consume the increment.*" *Id.* at 392 n.160 (emphasis added).

Critically, in the *Alabama Power* decision and the Texas Brief, there was no suggestion that a voluntary fuel switch would result in the entirety of a facility's emissions consuming increment. That a fuel switch is not a modification triggering PSD does not distinguish this example from the instant matter: both involve pre-January 6, 1975 major stationary sources, the initial emissions from which are included in the baseline concentration. Both include increases of emissions, either from a later modification or from a fuel switch, and in both, as the court stated in *Alabama Power*, only the *increased* emissions consume increment; the remainder (*i.e.*, the source's initial actual emissions) continue to be included in the baseline concentration.¹³

The 1980 Rule reiterated EPA's interpretation of the PSD increment consumption provisions as described in detail *supra* at 19-20 (discussing 45 Fed.

¹³ As further evidence that it was widely understood that EPA considered only increases to consume increments, the D.C. Circuit wrote: "Nor is there any quarrel over the scope or import of the last sentence of Section 169(4): emissions of sulfur dioxide and particulate matter from major facilities on which construction began after January 6, 1975, are not grandfathered into the baseline but rather count against the increments, even if such facilities are operating on the date of the first permit application." 636 F.2d at 376-77. The proposed interpretation offered by Petitioners here, that all of a modified source's emissions consume increment, would have undoubtedly been a source of significant quarrel had that been EPA's implementation of the Act.

Reg. 52,676); *see also* Order at 19 [JA __] (quoting same). Indeed, in discussing section 169(4), EPA wrote in the 1980 Rule: “The provision implies that both emissions increases and decreases should be considered for their impact on available increments.” 45 Fed. Reg. at 52,720. This articulates the basic principle of EPA’s interpretation of section 169(4), 42 U.S.C. § 7479(4), and explains EPA’s approach to increment consumption as driven by changes in emissions, whether in the particular setting at issue here or in the analogous fuel switching scenario discussed above.

Indeed, EPA noted in the 1980 Rule that *Alabama Power* had affirmed its position on increment consumption by increased emissions from voluntary fuel switches, and stated further: “Since actual air quality on the baseline date would not reflect these increases, their exclusion from baseline concentrations is consistent with EPA’s actual air quality approach to baseline concentrations.” *Id.* at 52,714. Also consistent with EPA’s actual air quality approach is EPA’s implementation of the PSD provisions at issue here – that only *changes* in emissions from modified major stationary sources that originally commenced construction prior to January 6, 1975, consume or expand increment, and not the entire facility’s emissions, as later constructed or modified. There is no question that EPA’s interpretation and implementation of the PSD increment consumption provisions challenged here was set forth in the 1978 and 1980 Rules, but not challenged at that time.

While any challenge to EPA's reading of the PSD increment consumption provisions arguably should have been made when it was first set forth – *i.e.*, in 1978, or at least in 1980 – the 2002 Rule also squarely reflected EPA's (by then) longstanding reading. *See supra* at 20-21 (quoting 67 Fed. Reg. at 80,202 [JA __]). Yet again, no challenge was made to that aspect of the Rule. *See New York v. EPA*, 413 F.3d 3, 10-11 (D.C. Cir. 2005) (listing petitioners' challenges). Finally, the 2010 Rule adopting increments for PM_{2.5} most recently reflected EPA's more-than-three-decades-old reading of the Act.¹⁴ *See supra* at 21 (quoting 75 Fed. Reg. at 64,869 [JA __]). And still, as with the prior rules, no challenge was made to that aspect of the Rule. *See Sierra Club v. EPA*, 705 F.3d 458, 461 (D.C. Cir. 2013) (listing scope of decision).

Thus, the time to challenge EPA's rulemakings implementing the PSD increment consumption provisions has long passed. 42 U.S.C. § 7607(b). *See Am. Rd. & Transp. Builders Ass'n v. EPA*, 705 F.3d 453 (D.C. Cir. 2013) (dismissing petition for review as time-barred challenge to EPA regulations). At the very latest, it should have been brought by December 20, 2010, the last date on which the 2010 Rule could have been challenged.

¹⁴ Indeed, in the more than thirty years since the 1977 Clean Air Act Amendments, during which period EPA has on several occasions promulgated nationally applicable regulations implementing the PSD program (*e.g.*, 1978, 1980, 1988, 1993, 2002, 2005, and 2010), EPA has not once indicated that increment consumption for sources that existed as of the major source baseline date (*i.e.*, January 6, 1975), and are subsequently constructed or modified, is calculated by anything other than *changes* in such a source's emissions. In other words, it has been clear from EPA's rulemakings over the last 30 years that EPA considers increases from modified sources that existed as of the major source baseline date to consume increment; never has EPA interpreted the Act in the manner advocated by the Petitioners here.

II. EPA Reasonably Concluded Petitioners Did Not Demonstrate A Deficiency in the Title V Permit.

Even if the Court determines it has jurisdiction, the petition must be denied, because EPA reasonably determined that Petitioners had not demonstrated that the Title V permit was inconsistent with any requirement of the Act, because Petitioners did not demonstrate any error in EPA's interpretation of section 169(4), 42 U.S.C. § 7479(4), or in its interpretation of implementing federal or state regulations.

Before EPA will be obligated to object to a Title V permit, a petitioner seeking such an objection must *demonstrate* to EPA that the Title V permit at issue is not in compliance with the Act. 42 U.S.C. § 7661d(b)(2); *Citizens Against Ruining the Environment*, 535 F.3d at 677-78. *See supra* at 11-13. Because the permit in this case was issued on the basis of state regulations (identical to EPA's) that the State interpreted consistent with EPA's longstanding interpretation of federal regulations governing which emissions will be counted as baseline emissions and which will consume increment, Petitioners face a daunting task in demonstrating that the permit is inconsistent with the requirements of the Act.

In their petition to the Agency and in their brief before this Court, Petitioners attempt to show error by challenging EPA's interpretation of the statute and the Wisconsin SIP (which mirrors EPA's regulations). Petition to Object at 59-63 [JA ___]; Pet. Br. at 22-25, 30-34. EPA reasonably rejected this attempt, relying in part upon the recent rejection by EPA's Environmental Appeals Board of the same statutory interpretation argument advanced by Petitioners. Order at 21 [JA ___]; *see*

In re N. Mich. at 36-46 [JA ____]. Given the statutory ambiguities discussed in this brief and the reasons underlying EPA's promulgation of those longstanding regulations, *see supra* at 14-21 and *infra* at 40-42, EPA reasonably found that Petitioners had "not presented a compelling basis for EPA to reconsider [the EAB's] interpretation." Order at 21 [JA ____]; *see Citizens Against Ruining the Environment*, 535 F.3d at 678 (holding EPA has discretion to determine requirements for an adequate demonstration). EPA thus reasonably concluded that Petitioners had not satisfied their burden of demonstrating error in Wisconsin's and EPA's interpretations of the Act, EPA's PSD regulations, or Wisconsin's SIP (which mirrors EPA's regulations), thus failing to demonstrate any deficiency in the permit. Order at 21 [JA ____].

A. Congress Did Not Speak Directly to How to Calculate Consumption of Increment from a Major Stationary Source Initially Constructed Prior to January 6, 1975, the Emissions From Which Later Increase Due to a Subsequent Modification.

As this matter presents a question of statutory interpretation, the inquiry begins with the language of the statute. *See Wisconsin Elec.*, 893 F.2d at 907 (citation omitted); *see supra* at 14-15 (text of section 169(4)). Petitioners challenge EPA's interpretation solely under *Chevron* Step One – contending that section 169(4), 42 U.S.C. § 7479(4), plainly *commands* that *all* emissions from any facility modified after January 6, 1975, consume increment, and no part of that facility's emissions can be attributable to baseline concentration, even if the facility was initially constructed *before* January 6, 1975. Since Petitioners offer only a *Chevron* Step One argument, their petition must be denied if the Court concludes that "the

statute is silent or ambiguous with respect to the specific issue.” *Chevron*, 467 U.S. at 843. Indeed, if the Court determines that EPA’s is a permissible interpretation of the statute, that determination itself necessarily compels rejection of Petitioners’ Step One argument. *Entergy Corp. v. Riverkeeper, Inc.*, 556 U.S. 208, 218 (2009). Here, an examination of the statute reveals that section 169(4), 42 U.S.C. § 7479(4), is ambiguous, and EPA reasonably interprets the ambiguous language to mean that only the *increased* emissions from such a later-modified source consume increment, while the remainder are included in the baseline concentration.

In certain respects, Congress spoke directly to how to calculate a baseline concentration for a pollutant. The first sentence of section 169(4), 42 U.S.C. § 7479(4), plainly specifies that the baseline concentration must reflect air pollutant concentrations (and hence emissions that produce such concentrations) that exist when the first PSD permit application is submitted for a specific pollutant (the “minor source baseline date”). 42 U.S.C. § 7479(4). The second and third sentences reflect a similar concept, but use a different date for *major* sources: January 6, 1975. In the second sentence, Congress specifically *added* to the baseline concentration emissions from *existing* major sources (or those that had at least commenced construction by that date). *Id.* In the third sentence, Congress *excluded* from the baseline concentration emissions from *new* major facilities not yet under construction as of January 6, 1975. *Id.*

Importantly, Congress also incorporated the concept of “modifications” into the definition of “construction,” used in the third sentence, through a reference to

section 111(a) of the Act, 42 U.S.C. § 7411(a). 42 U.S.C. § 7479(2)(C). “Construction” thus includes both initial construction *and* the subsequent modification of an existing facility. The fact that the term “construction” includes both initial construction and subsequent modification creates real ambiguity, because it is possible for the same source to be covered by both the second and third sentences of section 169(4). That is, a source could commence its initial construction prior to January 6, 1975; thus, per the second sentence, its emissions are included in the baseline concentration. But the same source could again “commence construction” *after* January 6, 1975, by virtue of a later modification, such that its emissions are excluded from the baseline concentration pursuant to the third sentence of section 169(4).

In sum, Congress did not speak directly to how to account for emissions from major emitting facilities initially constructed prior to January 6, 1975, that again commence “construction” after that date because they undergo a subsequent modification. Rather than prescribing a specific solution for this situation, Congress instead established the basic formula for calculating a baseline concentration in section 169(4), and left EPA to implement the statutory design. This is a classic delegation of gap-filling authority warranting *Chevron* deference in a highly technical area that demands specialized expertise. *Chevron*, 467 U.S. at 843; *Nat’l Cable & Telecomms. Ass’n v. Gulf Power Co.*, 534 U.S. 327, 339 (2002).

B. EPA Reasonably Interprets the Statute to Mean that Only Increases in Emissions from a Later Modified Major Source Consume Increment.

EPA, reasonably implementing its delegation of authority to fill the gaps left by the statutory definition of baseline concentration, has since the 1977 CAA Amendments stated that only *changes* in emissions from sources contributing to the baseline concentration consume or expand increment. By requiring increment analyses to focus on *changes* in emissions, EPA's approach is consistent with Congress' overall purpose in enacting the PSD provisions of the Act. Congress expected the PSD review process to assure that "economic growth will occur in a manner consistent with the preservation of existing clean air resources," 42 U.S.C. § 7470(3), and Congress expressly recognized that some increase in air emissions could be allowed as long as an adequate review is conducted by the permit authority. *Id.* § 7470(5). As the D.C. Circuit observed in *Alabama Power*, the program thus reflects a "balance" between Congress' "determination to preserve the clean air regions of the Nation" and "other vital economic and energy considerations." 636 F.2d at 387. EPA reasonably interprets the ambiguity in section 169(4) in furtherance of this congressional design.

EPA's focus on changes in emissions applies to modifications, which by definition are limited to those that result in an increase in emissions, *see* 42 U.S.C. § 7411(a). EPA's interpretation is that only the *increased emissions* consume increment, not the emissions of the entire source as modified. This interpretation of the statute is consistent with the Act because the emissions from the facility that are included in the baseline concentration per congressional direction (through the

second sentence of section 169(4)) remain in the baseline concentration no matter what the source may later do.

This makes sense: the program is designed to prevent the significant deterioration of air quality while simultaneously allowing for continued economic growth. Including existing major source emissions in the baseline concentration as Congress directed in the first two sentences of section 169(4) thus establishes a benchmark for existing air quality. Requiring that emissions from *new* major sources consume increment (per the third sentence), limits the number of new major sources that can construct in an area, thus preventing deterioration of the air quality from the benchmark. It thus follows logically from the overall purpose of the PSD program and the formula established by Congress in section 169(4) that *increased* emissions from a *modification* to a source whose emissions are included in the baseline concentration consume increment, but that the *entirety* of that source's emissions do not: the pre-modification emissions remain in the baseline concentration. Unlike Petitioners' interpretation, EPA's interpretation maintains the baseline concentration in reconciling the apparent conflict between the second and third sentences of section 169(4) as applied to facilities that are constructed before 1975 but subsequently modified – such as the Georgia Pacific facility at issue here.

EPA's interpretation is supported by section 163(c) of the Act, which repeatedly refers to "increase[s] in emissions" when delineating activities that result in increased emissions and thus consumption of increment, unless a Governor

sought an exemption for such activities. 42 U.S.C. § 7473(c); *see supra* at 34 (discussing EPA regulations implementing section 163(c)). Further, Congress defined “modification” as a change that *increases* emissions, 42 U.S.C. § 7411(a)(4), and incorporated that definition into section 169. *Id.* § 7479(2)(C). It follows from Congress’ definition of modification as turning on *increases* in emissions that only the *increase* in emissions consumes increment.

The EAB examined this same question of statutory interpretation in a decision issued in 2009, relied upon by EPA in its Order. *See In re N. Mich.* at 36-46 [JA __]; Order at 21 [JA __]. The EAB examined the text of the statute, EPA’s rulemakings, and legislative history in concluding that a permissible reading of the statute is that *actual emissions from the modification* consume increment, not the emissions from the entire facility. Order at 18 (citing *In re N. Mich.* at 46) [JA __]. The EAB’s interpretation of section 169(4) is entitled to *Chevron* deference. *See Resisting Envtl. Destruction on Indigenous Lands v. EPA*, 704 F.3d 743, 749 (9th Cir. 2012); *see also In re Lyon Cnty. Landfill*, 406 F.3d 981, 984 (8th Cir. 2005); *Sultan Chemists, Inc. v. EPA*, 281 F.3d 73, 79 (3d Cir. 2002).

Petitioners’ chief complaint—that EPA “read[s] the word ‘increases’ into the statute,” Pet. Br. at 24-25—is thus without merit. EPA reasonably interprets the three sentences of section 169(4), read together, to mean that with respect to a source initially constructed before January 6, 1975, and later modified, only the increased emissions from the modification consume increment, and not the entire source’s modifications.

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C. The Legislative History Supports EPA's Longstanding Approach to Increment Consumption as Based on Changes in Emissions.

Review of the legislative history of the 1977 CAA Amendments is not necessary to conclude that EPA has reasonably implemented the PSD program. Nonetheless, contrary to Petitioners' arguments, the available legislative history supports EPA's regulatory program.

Petitioners dispute that a report by the Senate Committee on Environment and Public Works supports the EAB's reasoning (as followed in EPA's Order). Pet Br. at 37-38. The EAB quoted the report as explaining, with respect to the exclusion from the baseline concentration of emissions from major sources commencing construction after January 6, 1975, "this of course does not include facilities built as replacements for sources in existence before January 6, 1975. Only the emissions from such replacement facilities *in excess of those* from the source replaced would be deducted from the increment." *In re N. Mich.* at 42-43 (quoting S. Rep. No. 95-127 at 97 (1977), *reprinted in* 3 A Legislative History of the Clean Air Act Amendments of 1977, at 1471 (1978) (the "Senate Report")) (emphasis original to EAB). The EAB reasonably concluded that this indicated Congress' intent that changes in emissions drive increment analyses, for both replaced and modified sources. *Id.*

Petitioners' objection is premised on its mistaken belief that "projects that do not increase emissions do not constitute 'construction' within the meaning of 42 U.S.C. § 7479(4)." Pet. Br. at 28. Petitioners' argument relies on the assumption that "construction" is limited to "modifications," which as discussed above, do

include an increase in emissions in their definition. But there is no basis for this position, and “construction” has a much broader meaning, not limited to modifications. *See, e.g., infra* at 53 (discussing addition of pollution control equipment as an example of construction).

EPA’s definition of construction for the PSD program forecloses Petitioners’ argument: “*Construction* means any physical change or change in the method of operation...that would result in a *change* in emissions.” 40 C.F.R. § 51.166(b)(8) (emphasis added). This is consistent with the quoted passage from the Senate Report, which is best illustrated by an example. Major stationary source A is initially constructed in 1974. Major stationary source B is initially constructed in 1984, and replaces source A. Source B emits 1,500 tons of particulate matter, while source A emitted 1,000 tons. In that situation, the Senate Report evinces Congress’ intent that, on a net basis, only 500 tons of emissions would consume increment: while the increase in 1,500 tons of PM from source B consumes increment, the reduction of 1,000 tons of emissions from source A expands the available increment, so the net impact is based on 500 tons of increased emissions. This is the point made by the EAB, using replaced sources as an example: that Congress clearly contemplated *changes* (whether increases or decreases) in emissions to affect increment. *In re N. Mich.* at 43 [JA ____].

While this example considers replaced sources, EPA’s interpretation of the Act and its regulations is the same for the situation here, where a pre-January 6, 1975, major stationary source is later modified. *See In re N. Mich.* at 42-43 [JA ____]

(applying discussion of replaced sources to modified sources by implication). EPA's implementation of section 169(4) such that only emission increases from the modification consume increment is consistent with the Senate Report, and most importantly, with the Act.

Petitioners also mischaracterize testimony by industry representatives quoted by the EAB. Pet. Br. at 26-27; *In re. N. Mich.* at 41-43 [JA ____]. Petitioners are correct that the testimony expresses concern that a replacement unit at a facility will consume increment, even if it is replacing a retired unit. Pet. Br. at 26. Petitioners then distort this testimony by claiming it is actually a complaint "that by modifying a plant, all of the plant's emissions would consume the increment, instead of only the amount of any emission increase consuming increment." *Id.* This goes too far. Nothing in the industry statement, or the fact that Congress did not change the provision then at issue, *see In re N. Mich.* at 42 [JA ____], suggests that Congress intended for the replacement of a single retired unit to mean the *entire* facility's emissions consume increment, instead of *that one unit's* emissions consuming increment and the retirement of the replaced unit expanding the available increment. And, as the EAB rightly pointed out, the Senate Report's (a more reliable source of legislative history) discussion of replaced sources indicates that Congress did expect that only increases in emission levels due to source replacement would consume increment. Ultimately, if this particular source of legislative history is applicable to the situation at hand, it certainly does not provide support for Petitioners' interpretation of section 169(4).

D. Petitioners Argue Without Merit that EPA's Interpretation of the Wisconsin SIP, and by Extension EPA's Own Regulations, Conflicts with the Plain Language of those Regulations.

In drafting the 1977 CAA Amendments, Congress delegated to EPA, as the agency charged with administering the statute, the responsibility to interpret and implement the Act. As EPA explained in the Order and as discussed above, Congress established a formula for the baseline concentration, then left EPA to implement that formula. Order at 17-18 [JA ____]. EPA's interpretation of the statute led to the regulatory definitions for minor source baseline date, major source baseline date, and trigger date. *Id.* EPA also promulgated the regulatory definition of baseline concentration at 40 C.F.R. §§ 51.166(b)(13) and 52.21(b)(13), and, at issue here, the exclusions from the baseline concentration at subsection (ii). *See supra* at 17.

Wisconsin adopted *substantively identical* regulations in its SIP. *Compare* Wis. Admin. Code NR § 405.02(4)(a) *with* 40 C.F.R. §§ 51.166(b)(13)(ii) and 52.21(b)(13)(ii); Order at 18 [JA ____]. Petitioners contend that EPA's interpretation of the Wisconsin SIP conflicts with the plain language of those regulations. Pet. Br. at 30-34. In the Order, EPA found no error in Wisconsin's interpretation of its SIP, which relied on EPA's interpretation of substantively identical federal regulations. Order at 17 [JA ____], discussing RTC at 7 [JA ____]. Thus, it is EPA's interpretation of its own regulations that is truly at issue. EPA is entitled to the highest deference in the interpretation of its own regulations, *Auer*, 519 U.S. at 461, particularly in this highly technical context. *Wisconsin Elec.*, 893 F.2d at 910; *see also Long Island Care at Home*, 127 S. Ct. at 2349.

Petitioners essentially contend that the definition of “baseline concentration” in the Wisconsin SIP—and thus actually EPA’s regulations—was meant to reflect *Petitioners’* interpretation regarding consumption of increment from modified sources. In support of this argument, Petitioners argue that because Wis. Admin. Code NR § 405.02(4)(b)(2) specifies that “[a]ctual emissions increases and decreases at any stationary source occurring after the minor source baseline date” are excluded from the baseline concentration, EPA must err in its interpretation of (b)(1), which does not specify increases and decreases in emissions in excluding from the baseline concentration emissions from major sources constructing after January 6, 1975. Pet. Br. 31-33. Again, these sections of the Wisconsin SIP are substantively identical to EPA’s regulations. *See* 40 C.F.R. §§ 51.166(b)(13)(ii)(a), (b) and 52.21(b)(13)(ii)(a), (b).

Petitioners’ argument fails because it does not demonstrate the terms of subparagraph (b)(1) preclude the interpretation applied by Wisconsin and EPA in the context of a modification of a major source that was initially constructed before the major source baseline date. This subparagraph covers “actual emissions . . . from any major stationary source on which construction commenced after the major source baseline date.” Wis. Admin. Code NR § 405.02(4)(b)(1); *cf.* 40 C.F.R. §§ 51.166(b)(13)(ii)(a) and 52.21(b)(13)(ii)(a). Petitioners do not demonstrate that EPA cannot permissibly interpret this language to describe the actual emissions attributable to the construction (*i.e.*, the modification) that commenced after the major source baseline date. Nor do they show that this language necessarily *must*

encompass actual emissions from construction that commenced prior to that date, *i.e.*, emissions in the baseline concentration.

EPA's interpretation is consistent with the regulatory definition of "construction": "any physical change or change in the method of operation . . . that would result in a *change* in emissions." 40 C.F.R. § 51.166(b)(8); *see also* Wis. Admin. Code NR § 405.02(11) (substantively identical definition in Wisconsin SIP). The concept of emissions *changes* is thus incorporated in the regulations challenged by Petitioners.

Further, identifying differences in regulatory provisions does nothing to contradict the fact that over the past 35 years, EPA has on several occasions articulated *consistently* its interpretation of the challenged regulations (which differs significantly from Petitioners'). In the Order, EPA reasonably relied on the reasoning articulated by the EAB in rejecting Petitioners' arguments.¹⁵ Order at 18, 21 [JA ____]. The EAB reviewed EPA's regulations and rulemakings dating back to 1978. *In re N. Mich.* at 36-37, 43-45 [JA ____]; *see Wisconsin Elec.*, 893 F.2d at 915 (giving deference to EPA's explanation of its regulations in preamble to 1974 rulemaking). The EAB considered *inter alia* the then-most recent EPA pronouncements on this issue, a proposed rulemaking in 2007. *Id.* at 37, 40, 43-45, citing 72 Fed. Reg. 31,372 (June 6, 2007). For example, EPA in that proposed rule stated:

¹⁵ Although articulated by the EAB in the context of a permit issued under EPA's regulations, the analysis is equally applicable when the same language is used in the Wisconsin SIP.

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For each source that was in existence on the relevant baseline date (major source or minor source), the inventory includes the source's actual emissions on the baseline date and its current actual emissions. The change in emissions over these time periods represents the emissions that consume increment.

Id. at 31,377. EPA further explicitly stated that 40 C.F.R. §§ 51.166(b)(13)(ii) and 52.21(b)(13)(ii) implement this interpretation of the statute. *Id.* at 31,380. This is consistent with EPA's pronouncements in the 1978 and 1980 Rules, also quoted by the EAB. *See supra* at Argument I.A (discussing 1978 and 1980 Rules); *see also In re N. Mich.* at 43-44 [JA ____].¹⁶

E. Petitioners' Interpretation of the Act Leads to Results Inapposite to the Purpose and Design of the PSD Program.

As noted above, the PSD program is designed to ensure that "economic growth will occur in a manner consistent with the preservation of existing clean air resources." 42 U.S.C. § 7470(3). Congress recognized that this approach—preserving clean air while allowing for economic growth—did not foreclose an increase in emissions, so long as the decision allowing for increased emissions was subject to adequate review. *Id.* § 7470(5). Petitioners' desired interpretation of the PSD

¹⁶ EPA's interpretation is also articulated in the Draft NSR Manual. In the subsection titled "Increment Consumption and Expansion," EPA wrote:

Emissions increases that consume a portion of the applicable increment are, in general, all those *not* accounted for in the baseline concentration and specifically include: actual emissions *increases* occurring after the major source baseline date [*i.e.*, January 6, 1975], which are associated with physical changes or changes in the method of operation (*i.e.*, construction) at a major stationary source.

NSR Manual at C.10 (emphases original and added).

provisions is fundamentally at odds with the Congressional design and would lead to absurd results, as demonstrated by the following two examples.

Both examples center on a hypothetical facility: a major stationary source that initially commenced construction prior to January 6, 1975. This hypothetical facility emits 1,500 tons of particulate matter, all of which are included in the baseline concentration. The first example: Adding pollution control equipment qualifies as “construction” under EPA’s regulatory definition, *see supra* at 47, because it is a physical change to the facility that results in a change in emissions. 40 C.F.R. § 51.166(b)(8). The hypothetical facility added pollution control equipment in 1995, reducing its emissions of particulate matter from 1,500 tons to 1,000 tons. Under Petitioners’ interpretation, because the hypothetical facility commenced “construction” in 1995, the pollutant concentration associated with 1,000 tons of emissions *consume* increment, even though the facility actually *reduced* its emissions. Petitioners’ interpretation thus hinders economic growth by perversely reducing the amount of available increment when a facility predating the major source baseline date reduces its emissions. This patently absurd result is clearly at odds with Congress’ intent when it added the PSD program to the CAA.

In the second example, the hypothetical facility undergoes a major modification in 1995 that results in its emissions of particulate matter increasing by 40 tons per year, to 1,540 tons. Under EPA’s interpretation, 1,500 tons of emissions would remain in the baseline concentration, and pollutant concentration attributable to 40 tons of emissions would be consumed. As discussed above, this

makes sense: the baseline concentration reflects the benchmark air quality, significant deterioration from which is to be avoided. If the increment analysis shows that the increase in emissions of 40 tons per year will not result in an increase in pollutant concentration greater than the available increment, then the modification is permissible, and air quality does not significantly deteriorate. Under Petitioners' interpretation, none of the emissions from the facility would remain in the baseline concentration, and enough of the increment in that area would have to be available to permit an increase in the pollutant concentration attributable to 1,540 tons of emissions. This heavily penalizes, and in some areas might make it impossible for older sources to make modifications that would, for example, improve their efficiency while also slightly increasing emissions. There is nothing to indicate this was Congress' intent in establishing the PSD program in the way it did.

As this Court has previously observed, pre-January 6, 1975, sources are not permanently exempted from the PSD program; to the contrary, they are subject to PSD requirements *when they are modified*. *Wisconsin Elec.*, 893 F.2d at 909. "The purpose of the 'modification' rule is to ensure that pollution control measures are undertaken when they can be most effective, at the time of new or modified construction." *Id.*, quoting *National-Southwire Aluminum Co. v. EPA*, 838 F.2d 835, 843 (6th Cir. 1988) (Boggs, J. dissenting) (quoting 116 Cong. Rec. 32,918 (remarks of Sen. Cooper), *reprinted in* 1 Senate Committee on Public Works, A Legislative History of the Clean Air Act Amendments of 1970 (1974), at 260). Instead of furthering congressional design, Petitioners would instead use a modification to a

facility as an excuse to go back in time and undo Congress' determination that certain emissions from that facility would be included in the baseline concentration.

Indeed, Petitioners' approach would continuously ratchet down the baseline until it no longer contains *any* emissions from major sources initially constructed prior to January 6, 1975 (*i.e.*, when all pre-January 6, 1975, major sources have either closed or modified their facilities). At that point, *only* those major sources whose emissions are allowed by the increment could exist in a baseline area. Under EPA's approach, allowable emissions are the baseline plus the increment, thus limiting emissions to prevent significant deterioration but simultaneously allowing for economic growth. Congress could have, had it wished, directed that emissions in the baseline concentration no longer be considered part of the baseline if a facility modifies. Congress did not so direct, however, and Petitioners' approach severely curtails economic development in a manner clearly not intended by Congress.

Moreover, pre-January 6, 1975, sources and potential new sources are on equal footing with respect to competing for available increment under EPA's interpretation. If a new source wants to construct and emit 1,000 tons of particulate matter, there must be sufficient increment available in the area to allow that construction. If a pre-January 6, 1975, source wants to undertake a modification that would result in an increase in its actual emissions of 1,000 tons of particulate matter over that source's baseline levels, there again must be sufficient increment available in that area to allow that modification. There is no material difference and Petitioners' complaint of EPA causing a "barrier to new industry" (Pet. Br. at 34) is

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unfounded. Indeed, Petitioners' theory would deter desirable construction and economic growth because the modified source that has to count its emissions before the modification as consuming increment might consume such a large amount of the available increment that it prevents *any* opportunity for new industry to locate in the area.

CONCLUSION

For the foregoing reasons, the petition for review should be dismissed for lack of jurisdiction or denied for lack of merit.

Respectfully submitted,

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Dated: May 3, 2013

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CERTIFICATE OF SERVICE

I hereby certify that on May 3, 2013, a copy of the foregoing was served electronically through the Court's CM/ECF system on all registered counsel.

Dated: May 3, 2013s/ Dustin J. Maghamfar

Dustin J. Maghamfar

Attorney for Respondents

CERTIFICATE OF COMPLIANCE

I certify that pursuant to Rule 32(a)(7)(C) of the Federal Rules of Appellate Procedure and Seventh Circuit Rule 32, the attached brief is proportionately spaced, has a typeface of 12 points, and contains 13,957 words, exclusive of those parts of the brief exempted by Rule 32(a)(7)(B)(iii). I have relied on Microsoft Word's calculation feature.

Dated: May 3, 2013s/ Dustin J. Maghamfar

Dustin J. Maghamfar

Attorney for Respondents

STATUTORY AND REGULATORY ADDENDUM

* For the convenience of the Court, we have duplicated certain key statutes and regulations here, also appended to Petitioners' brief.

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STATUTES

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40 C.F.R. § 51.166(b).....	ADD23
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Subsec. (a)(6). Pub. L. 95-95, § 108(e), added par. (6).
 Subsec. (c)(1). Pub. L. 95-95, § 108(d)(1), (2), substituted "plan which meets the requirements of this section" for "plan for any national ambient air quality primary or secondary standard within the time prescribed" in subpar. (A) and, in provisions following subpar. (C), directed that any portion of a plan relating to any measure described in first sentence of 7421 of this title (relating to consultation) or the consultation process required under such section 7421 of this title not be required to be promulgated before the date eight months after such date required for submission.

Subsec. (c)(3) to (5). Pub. L. 95-95, § 108(d)(3), added pars. (3) to (5).

Subsec. (d). Pub. L. 95-95, § 108(f), substituted "and which implements the requirements of this section" for "and which implements a national primary or secondary ambient air quality standard in a State".

Subsec. (f). Pub. L. 95-95, § 107(a), substituted provisions relating to the handling of national or regional energy emergencies for provisions relating to the postponement of compliance by stationary sources or classes of moving sources with any requirement of applicable implementation plans.

Subsec. (g). Pub. L. 95-95, § 108(g), added subsec. (g) relating to publication of comprehensive document.

Pub. L. 95-95, § 107(b), added subsec. (g) relating to Governor's authority to issue temporary emergency suspensions.

Subsec. (h). Pub. L. 95-190, § 14(a)(5), redesignated subsec. (g), added by Pub. L. 95-95, § 108(g), as (h). Former subsec. (h) redesignated (i).

Subsec. (i). Pub. L. 95-190, § 14(a)(5), redesignated subsec. (h), added by Pub. L. 95-95, § 108(g), as (i). Former subsec. (i) redesignated (j) and amended.

Subsec. (j). Pub. L. 95-190 § 14(a)(6), (8), redesignated subsec. (i), added by Pub. L. 95-95, § 108(g), as (j) and in subsec. (j) as so redesignated, substituted "will enable such source" for "at such source will enable it".

1974—Subsec. (a)(3). Pub. L. 93-319, § 4(a), designated existing provisions as subpar. (A) and added subpar. (B).

Subsec. (c). Pub. L. 93-319, § 4(b), designated existing provisions as par. (1) and existing pars. (1), (2), and (3) as subpars. (A), (B), and (C), respectively, of such redesignated par. (1), and added par. (2).

EFFECTIVE DATE OF 1977 AMENDMENT

Amendment by Pub. L. 95-95 effective Aug. 7, 1977, except as otherwise expressly provided, see section 408(d) of Pub. L. 95-95, set out as a note under section 7401 of this title.

PENDING ACTIONS AND PROCEEDINGS

Suits, actions, and other proceedings lawfully commenced by or against the Administrator or any other officer or employee of the United States in his official capacity or in relation to the discharge of his official duties under act July 14, 1955, the Clean Air Act, as in effect immediately prior to the enactment of Pub. L. 95-95 [Aug. 7, 1977], not to abate by reason of the taking effect of Pub. L. 95-95, see section 408(a) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

MODIFICATION OR RESCISSION OF RULES, REGULATIONS, ORDERS, DETERMINATIONS, CONTRACTS, CERTIFICATIONS, AUTHORIZATIONS, DELEGATIONS, AND OTHER ACTIONS

All rules, regulations, orders, determinations, contracts, certifications, authorizations, delegations, or other actions duly issued, made, or taken by or pursuant to act July 14, 1955, the Clean Air Act, as in effect immediately prior to the date of enactment of Pub. L. 95-95 [Aug. 7, 1977] to continue in full force and effect until modified or rescinded in accordance with act July 14, 1955, as amended by Pub. L. 95-95 [this chapter], see section 408(b) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

MODIFICATION OR RESCISSION OF IMPLEMENTATION PLANS APPROVED AND IN EFFECT PRIOR TO AUG. 7, 1977

Nothing in the Clean Air Act Amendments of 1977 [Pub. L. 95-95] to affect any requirement of an approved implementation plan under this section or any other provision in effect under this chapter before Aug. 7, 1977, until modified or rescinded in accordance with this chapter as amended by the Clean Air Act Amendments of 1977, see section 408(c) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

SAVINGS PROVISION

Section 16 of Pub. L. 91-604 provided that:

"(a)(1) Any implementation plan adopted by any State and submitted to the Secretary of Health, Education, and Welfare, or to the Administrator pursuant to the Clean Air Act [this chapter] prior to enactment of this Act [Dec. 31, 1970] may be approved under section 110 of the Clean Air Act [this section] (as amended by this Act) [Pub. L. 91-604] and shall remain in effect, unless the Administrator determines that such implementation plan, or any portion thereof, is not consistent with applicable requirements of the Clean Air Act [this chapter] (as amended by this Act) and will not provide for the attainment of national primary ambient air quality standards in the time required by such Act. If the Administrator so determines, he shall, within 90 days after promulgation of any national ambient air quality standards pursuant to section 109(a) of the Clean Air Act [section 7409(a) of this title], notify the State and specify in what respects changes are needed to meet the additional requirements of such Act, including requirements to implement national secondary ambient air quality standards. If such changes are not adopted by the State after public hearings and within six months after such notification, the Administrator shall promulgate such changes pursuant to section 110(c) of such Act [subsec. (c) of this section].

"(2) The amendments made by section 4(b) [amending sections 7403 and 7415 of this title] shall not be construed as repealing or modifying the powers of the Administrator with respect to any conference convened under section 108(d) of the Clean Air Act [section 7415 of this title] before the date of enactment of this Act [Dec. 31, 1970].

"(b) Regulations or standards issued under this title II of the Clean Air Act [subchapter II of this chapter] prior to the enactment of this Act [Dec. 31, 1970] shall continue in effect until revised by the Administrator consistent with the purposes of such Act [this chapter]."

FEDERAL ENERGY ADMINISTRATOR

"Federal Energy Administrator", for purposes of this chapter, to mean Administrator of Federal Energy Administration established by Pub. L. 93-275, May 7, 1974, 88 Stat. 97, which is classified to section 761 et seq. of Title 15, Commerce and Trade, but with the term to mean any officer of the United States designated as such by the President until Federal Energy Administrator takes office and after Federal Energy Administration ceases to exist, see section 798 of Title 15, Commerce and Trade.

Federal Energy Administration terminated and functions vested by law in Administrator thereof transferred to Secretary of Energy (unless otherwise specifically provided) by sections 7151(a) and 7293 of this title.

§ 7411. Standards of performance for new stationary sources

(a) Definitions

For purposes of this section:

(1) The term "standard of performance" means a standard for emissions of air pollutants which reflects the degree of emission limitation achievable through the application of

the best system of emission reduction which (taking into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.

(2) The term "new source" means any stationary source, the construction or modification of which is commenced after the publication of regulations (or, if earlier, proposed regulations) prescribing a standard of performance under this section which will be applicable to such source.

(3) The term "stationary source" means any building, structure, facility, or installation which emits or may emit any air pollutant. Nothing in subchapter II of this chapter relating to nonroad engines shall be construed to apply to stationary internal combustion engines.

(4) The term "modification" means any physical change in, or change in the method of operation of, a stationary source which increases the amount of any air pollutant emitted by such source or which results in the emission of any air pollutant not previously emitted.

(5) The term "owner or operator" means any person who owns, leases, operates, controls, or supervises a stationary source.

(6) The term "existing source" means any stationary source other than a new source.

(7) The term "technological system of continuous emission reduction" means—

(A) a technological process for production or operation by any source which is inherently low-polluting or nonpolluting, or

(B) a technological system for continuous reduction of the pollution generated by a source before such pollution is emitted into the ambient air, including precombustion cleaning or treatment of fuels.

(8) A conversion to coal (A) by reason of an order under section 2(a) of the Energy Supply and Environmental Coordination Act of 1974 [15 U.S.C. 792(a)] or any amendment thereto, or any subsequent enactment which supersedes such Act [15 U.S.C. 791 et seq.], or (B) which qualifies under section 7413(d)(5)(A)(ii)¹ of this title, shall not be deemed to be a modification for purposes of paragraphs (2) and (4) of this subsection.

(b) List of categories of stationary sources; standards of performance; information on pollution control techniques; sources owned or operated by United States; particular systems; revised standards

(1)(A) The Administrator shall, within 90 days after December 31, 1970, publish (and from time to time thereafter shall revise) a list of categories of stationary sources. He shall include a category of sources in such list if in his judgment it causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare.

(B) Within one year after the inclusion of a category of stationary sources in a list under subparagraph (A), the Administrator shall pub-

lish proposed regulations, establishing Federal standards of performance for new sources within such category. The Administrator shall afford interested persons an opportunity for written comment on such proposed regulations. After considering such comments, he shall promulgate, within one year after such publication, such standards with such modifications as he deems appropriate. The Administrator shall, at least every 8 years, review and, if appropriate, revise such standards following the procedure required by this subsection for promulgation of such standards. Notwithstanding the requirements of the previous sentence, the Administrator need not review any such standard if the Administrator determines that such review is not appropriate in light of readily available information on the efficacy of such standard. Standards of performance or revisions thereof shall become effective upon promulgation. When implementation and enforcement of any requirement of this chapter indicate that emission limitations and percent reductions beyond those required by the standards promulgated under this section are achieved in practice, the Administrator shall, when revising standards promulgated under this section, consider the emission limitations and percent reductions achieved in practice.

(2) The Administrator may distinguish among classes, types, and sizes within categories of new sources for the purpose of establishing such standards.

(3) The Administrator shall, from time to time, issue information on pollution control techniques for categories of new sources and air pollutants subject to the provisions of this section.

(4) The provisions of this section shall apply to any new source owned or operated by the United States.

(5) Except as otherwise authorized under subsection (h) of this section, nothing in this section shall be construed to require, or to authorize the Administrator to require, any new or modified source to install and operate any particular technological system of continuous emission reduction to comply with any new source standard of performance.

(6) The revised standards of performance required by enactment of subsection (a)(1)(A)(i) and (ii)¹ of this section shall be promulgated not later than one year after August 7, 1977. Any new or modified fossil fuel fired stationary source which commences construction prior to the date of publication of the proposed revised standards shall not be required to comply with such revised standards.

(c) State implementation and enforcement of standards of performance

(1) Each State may develop and submit to the Administrator a procedure for implementing and enforcing standards of performance for new sources located in such State. If the Administrator finds the State procedure is adequate, he shall delegate to such State any authority he has under this chapter to implement and enforce such standards.

(2) Nothing in this subsection shall prohibit the Administrator from enforcing any applicable standard of performance under this section.

¹ See References in Text note below.

730, set forth other provisions of law that would be unaffected by this part.

Section 7459, act July 14, 1955, ch. 360, title I, §159, as added Aug. 7, 1977, Pub. L. 95-95, title I, §126, 91 Stat. 730, related to authority of States to protect the stratosphere.

SIMILAR PROVISIONS

For provisions relating to stratospheric ozone protection, see section 7671 et seq. of this title.

PART C—PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

SUBPART I—CLEAN AIR

§ 7470. Congressional declaration of purpose

The purposes of this part are as follows:

(1) to protect public health and welfare from any actual or potential adverse effect which in the Administrator's judgment may reasonably be anticipated to occur from air pollution or from exposures to pollutants in other media, which pollutants originate as emissions to the ambient air¹, notwithstanding attainment and maintenance of all national ambient air quality standards;

(2) to preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special national or regional natural, recreational, scenic, or historic value;

(3) to insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources;

(4) to assure that emissions from any source in any State will not interfere with any portion of the applicable implementation plan to prevent significant deterioration of air quality for any other State; and

(5) to assure that any decision to permit increased air pollution in any area to which this section applies is made only after careful evaluation of all the consequences of such a decision and after adequate procedural opportunities for informed public participation in the decisionmaking process.

(July 14, 1955, ch. 360, title I, §160, as added Pub. L. 95-95, title I, §127(a), Aug. 7, 1977, 91 Stat. 731.)

EFFECTIVE DATE

Subpart effective Aug. 7, 1977, except as otherwise expressly provided, see section 406(d) of Pub. L. 95-95, set out as an Effective Date of 1977 Amendment note under section 7401 of this title.

GUIDANCE DOCUMENT

Section 127(c) of Pub. L. 95-95 required Administrator, not later than 1 year after Aug. 7, 1977, to publish a guidance document to assist States in carrying out their functions under part C of title I of the Clean Air Act (this part) with respect to pollutants for which national ambient air quality standards are promulgated.

STUDY AND REPORT ON PROGRESS MADE IN PROGRAM RELATING TO SIGNIFICANT DETERIORATION OF AIR QUALITY

Section 127(d) of Pub. L. 95-95 directed Administrator, not later than 2 years after Aug. 7, 1977, to complete a

study and report to Congress on progress made in carrying out part C of title I of the Clean Air Act (this part) and the problems associated in carrying out such section.

§ 7471. Plan requirements

In accordance with the policy of section 7401(b)(1) of this title, each applicable implementation plan shall contain emission limitations and such other measures as may be necessary, as determined under regulations promulgated under this part, to prevent significant deterioration of air quality in each region (or portion thereof) designated pursuant to section 7407 of this title as attainment or unclassifiable.

(July 14, 1955, ch. 360, title I, §161, as added Pub. L. 95-95, title I, §127(a), Aug. 7, 1977, 91 Stat. 731; amended Pub. L. 101-549, title I, §110(1), Nov. 15, 1990, 104 Stat. 2470.)

AMENDMENTS

1990—Pub. L. 101-549 substituted "designated pursuant to section 7407 of this title as attainment or unclassifiable" for "identified pursuant to section 7407(d)(1)(D) or (E) of this title".

§ 7472. Initial classifications

(a) Areas designated as class I

Upon the enactment of this part, all—

- (1) international parks,
- (2) national wilderness areas which exceed 5,000 acres in size,
- (3) national memorial parks which exceed 5,000 acres in size, and
- (4) national parks which exceed six thousand acres in size,

and which are in existence on August 7, 1977, shall be class I areas and may not be redesignated. All areas which were redesignated as class I under regulations promulgated before August 7, 1977, shall be class I areas which may be redesignated as provided in this part. The extent of the areas designated as Class I under this section shall conform to any changes in the boundaries of such areas which have occurred subsequent to August 7, 1977, or which may occur subsequent to November 15, 1990.

(b) Areas designated as class II

All areas in such State designated pursuant to section 7407(d) of this title as attainment or unclassifiable which are not established as class I under subsection (a) of this section shall be class II areas unless redesignated under section 7474 of this title.

(July 14, 1955, ch. 360, title I, §162, as added Pub. L. 95-95, title I, §127(a), Aug. 7, 1977, 91 Stat. 731; amended Pub. L. 95-190, §14(a)(40), Nov. 16, 1977, 91 Stat. 1401; Pub. L. 101-549, title I, §108(m), 110(2), Nov. 15, 1990, 104 Stat. 2469, 2470.)

AMENDMENTS

1990—Subsec. (a). Pub. L. 101-549, §108(m), inserted at end "The extent of the areas designated as Class I under this section shall conform to any changes in the boundaries of such areas which have occurred subsequent to August 7, 1977, or which may occur subsequent to November 15, 1990."

Subsec. (b). Pub. L. 101-549, §110(2), substituted "designated pursuant to section 7407(d) of this title as attainment or unclassifiable" for "identified pursuant to section 7407(d)(1)(D) or (E) of this title".

¹So in original. Probably should be "anticipated".

²So in original. Section was enacted without an opening parenthesis.

1977—Subsec. (a)(4), Pub. L. 95-190 inserted a comma after "size".

§ 7473. Increments and ceilings

(a) **Sulfur oxide and particulate matter; requirement that maximum allowable increases and maximum allowable concentrations not be exceeded**

In the case of sulfur oxide and particulate matter, each applicable implementation plan shall contain measures assuring that maximum allowable increases over baseline concentrations of, and maximum allowable concentrations of, such pollutant shall not be exceeded. In the case of any maximum allowable increase (except an allowable increase specified under section 7475(d)(2)(C)(iv) of this title) for a pollutant based on concentrations permitted under national ambient air quality standards for any period other than an annual period, such regulations shall permit such maximum allowable increase to be exceeded during one such period per year.

(b) **Maximum allowable increases in concentrations over baseline concentrations**

(1) For any class I area, the maximum allowable increase in concentrations of sulfur dioxide and particulate matter over the baseline concentration of such pollutants shall not exceed the following amounts:

Pollutant	Maximum allowable increase (in micrograms per cubic meter)
Particulate matter:	
Annual geometric mean	5
Twenty-four-hour maximum	10
Sulfur dioxide:	
Annual arithmetic mean	2
Twenty-four-hour maximum	5
Three-hour maximum	25

(2) For any class II area, the maximum allowable increase in concentrations of sulfur dioxide and particulate matter over the baseline concentration of such pollutants shall not exceed the following amounts:

Pollutant	Maximum allowable increase (in micrograms per cubic meter)
Particulate matter:	
Annual geometric mean	19
Twenty-four-hour maximum	37
Sulfur dioxide:	
Annual arithmetic mean	20
Twenty-four-hour maximum	91
Three-hour maximum	512

(3) For any class III area, the maximum allowable increase in concentrations of sulfur dioxide and particulate matter over the baseline concentration of such pollutants shall not exceed the following amounts:

Pollutant	Maximum allowable increase (in micrograms per cubic meter)
Particulate matter:	
Annual geometric mean	37
Twenty-four-hour maximum	75
Sulfur dioxide:	
Annual arithmetic mean	40
Twenty-four-hour maximum	182
Three-hour maximum	700

(4) The maximum allowable concentration of any air pollutant in any area to which this part applies shall not exceed a concentration for such pollutant for each period of exposure equal to—

(A) the concentration permitted under the national secondary ambient air quality standard, or

(B) the concentration permitted under the national primary ambient air quality standard,

whichever concentration is lowest for such pollutant for such period of exposure.

(c) **Orders or rules for determining compliance with maximum allowable increases in ambient concentrations of air pollutants**

(1) In the case of any State which has a plan approved by the Administrator for purposes of carrying out this part, the Governor of such State may, after notice and opportunity for public hearing, issue orders or promulgate rules providing that for purposes of determining compliance with the maximum allowable increases in ambient concentrations of an air pollutant, the following concentrations of such pollutant shall not be taken into account:

(A) concentrations of such pollutant attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, or natural gas, or both, by reason of an order which is in effect under the provisions of sections 792(a) and (b) of title 15 (or any subsequent legislation which supersedes such provisions) over the emissions from such sources before the effective date of such order.¹

(B) the concentrations of such pollutant attributable to the increase in emissions from stationary sources which have converted from using natural gas by reason of a natural gas curtailment pursuant to a natural gas curtailment plan in effect pursuant to the Federal Power Act [16 U.S.C. 791a et seq.] over the emissions from such sources before the effective date of such plan,

(C) concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities, and

(D) the increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration determined in accordance with section 7479(4) of this title.

(2) No action taken with respect to a source under paragraph (1)(A) or (1)(B) shall apply more than five years after the effective date of the order referred to in paragraph (1)(A) or the plan referred to in paragraph (1)(B), whichever is applicable. If both such order and plan are applicable, no such action shall apply more than five years after the later of such effective dates.

(3) No action under this subsection shall take effect unless the Governor submits the order or rule providing for such exclusion to the Administrator and the Administrator determines that such order or rule is in compliance with the provisions of this subsection.

(July 14, 1955, ch. 360, title I, § 163, as added Pub. L. 95-95, title I, § 127(a), Aug. 7, 1977, 91 Stat. 732; amended Pub. L. 95-190, § 14(a)(41), Nov. 16, 1977, 91 Stat. 1401.)

¹ So in original. The period probably should be a comma.

REFERENCES IN TEXT

The Federal Power Act, referred to in subsec. (c)(1)(B), is act June 10, 1920, ch. 285, 41 Stat. 1063, as amended, which is classified generally to chapter 12 (§ 791a et seq.) of Title 16, Conservation. For complete classification of this Act to the Code, see section 791a of Title 16 and Tables.

AMENDMENTS

1977—Subsec. (a). Pub. L. 95-190 inserted "section" before "7475".

§ 7474. Area redesignation

(a) Authority of States to redesignate areas

Except as otherwise provided under subsection (c) of this section, a State may redesignate such areas as it deems appropriate as class I areas. The following areas may be redesignated only as class I or II:

(1) an area which exceeds ten thousand acres in size and is a national monument, a national primitive area, a national preserve, a national recreation area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore, and

(2) a national park or national wilderness area established after August 7, 1977, which exceeds ten thousand acres in size.

The extent of the areas referred to in paragraph¹ (1) and (2) shall conform to any changes in the boundaries of such areas which have occurred subsequent to August 7, 1977, or which may occur subsequent to November 15, 1990. Any area (other than an area referred to in paragraph (1) or (2) or an area established as class I under the first sentence of section 7472(a) of this title) may be redesignated by the State as class III if—

(A) such redesignation has been specifically approved by the Governor of the State, after consultation with the appropriate Committees of the legislature if it is in session or with the leadership of the legislature if it is not in session (unless State law provides that such redesignation must be specifically approved by State legislation) and if general purpose units of local government representing a majority of the residents of the area so redesignated enact legislation (including for such units of local government resolutions where appropriate) concurring in the State's redesignation;

(B) such redesignation will not cause, or contribute to, concentrations of any air pollutant which exceed any maximum allowable increase or maximum allowable concentration permitted under the classification of any other area; and

(C) such redesignation otherwise meets the requirements of this part.

Subparagraph (A) of this paragraph shall not apply to area redesignations by Indian tribes.

(b) Notice and hearing; notice to Federal land manager; written comments and recommendations; regulations; disapproval of redesignation

(1)(A) Prior to redesignation of any area under this part, notice shall be afforded and public

hearings shall be conducted in areas proposed to be redesignated and in areas which may be affected by the proposed redesignation. Prior to any such public hearing a satisfactory description and analysis of the health, environmental, economic, social, and energy effects of the proposed redesignation shall be prepared and made available for public inspection and prior to any such redesignation, the description and analysis of such effects shall be reviewed and examined by the redesignating authorities.

(B) Prior to the issuance of notice under subparagraph (A) respecting the redesignation of any area under this subsection, if such area includes any Federal lands, the State shall provide written notice to the appropriate Federal land manager and afford adequate opportunity (but not in excess of 60 days) to confer with the State respecting the intended notice of redesignation and to submit written comments and recommendations with respect to such intended notice of redesignation. In redesignating any area under this section with respect to which any Federal land manager has submitted written comments and recommendations, the State shall publish a list of any inconsistency between such redesignation and such recommendations and an explanation of such inconsistency (together with the reasons for making such redesignation against the recommendation of the Federal land manager).

(C) The Administrator shall promulgate regulations not later than six months after August 7, 1977, to assure, insofar as practicable, that prior to any public hearing on redesignation of any area, there shall be available for public inspection any specific plans for any new or modified major emitting facility which may be permitted to be constructed and operated only if the area in question is designated or redesignated as class III.

(2) The Administrator may disapprove the redesignation of any area only if he finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this section or is inconsistent with the requirements of section 7472(a) of this title or of subsection (a) of this section. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.

(c) Indian reservations

Lands within the exterior boundaries of reservations of federally recognized Indian tribes may be redesignated only by the appropriate Indian governing body. Such Indian governing body shall be subject in all respect to the provisions of subsection (e) of this section.

(d) Review of national monuments, primitive areas, and national preserves

The Federal Land Manager shall review all national monuments, primitive areas, and national preserves, and shall recommend any appropriate areas for redesignation as class I where air quality related values are important attributes of the area. The Federal Land Manager shall report such recommendations, within² supporting analysis, to the Congress and the affected States

¹ So in original. Probably should be "paragraphs".

² So in original. Probably should be "with".

within one year after August 7, 1977. The Federal Land Manager shall consult with the appropriate States before making such recommendations.

(e) Resolution of disputes between State and Indian tribes

If any State affected by the redesignation of an area by an Indian tribe or any Indian tribe affected by the redesignation of an area by a State disagrees with such redesignation of any area, or if a permit is proposed to be issued for any new major emitting facility proposed for construction in any State which the Governor of an affected State or governing body of an affected Indian tribe determines will cause or contribute to a cumulative change in air quality in excess of that allowed in this part within the affected State or tribal reservation, the Governor or Indian ruling body may request the Administrator to enter into negotiations with the parties involved to resolve such dispute. If requested by any State or Indian tribe involved, the Administrator shall make a recommendation to resolve the dispute and protect the air quality related values of the lands involved. If the parties involved do not reach agreement, the Administrator shall resolve the dispute and his determination, or the results of agreements reached through other means, shall become part of the applicable plan and shall be enforceable as part of such plan. In resolving such disputes relating to area redesignation, the Administrator shall consider the extent to which the lands involved are of sufficient size to allow effective air quality management or have air quality related values of such an area.

(July 14, 1955, ch. 360, title I, § 164, as added Pub. L. 95-95, title I, § 127(a), Aug. 7, 1977, 91 Stat. 733; amended Pub. L. 95-190, § 14(a)(42), (43), Nov. 16, 1977, 91 Stat. 1402; Pub. L. 101-549, title I, § 108(n), Nov. 15, 1990, 104 Stat. 2469.)

AMENDMENTS

1990—Subsec. (a) Pub. L. 101-549, which directed the insertion of "The extent of the areas referred to in paragraph (1) and (2) shall conform to any changes in the boundaries of such areas which have occurred subsequent to August 7, 1977, or which may occur subsequent to November 15, 1990," before "Any area (other than an area referred to in paragraph (1) or (2))", was executed by making the insertion before "Any area (other than an area referred to in paragraph (1) or (2))", to reflect the probable intent of Congress.

1977—Subsec. (b)(2). Pub. L. 95-190, § 14(a)(42), inserted "or is inconsistent with the requirements of section 7472(a) of this title or of subsection (a) of this section" after "this section".

Subsec. (e). Pub. L. 95-190, § 14(a)(43), inserted "an" after "If any State affected by the redesignation of".

§ 7475. Preconstruction requirements

(a) Major emitting facilities on which construction is commenced

No major emitting facility on which construction is commenced after August 7, 1977, may be constructed in any area to which this part applies unless—

(1) a permit has been issued for such proposed facility in accordance with this part setting forth emission limitations for such facility which conform to the requirements of this part;

(2) the proposed permit has been subject to a review in accordance with this section, the required analysis has been conducted in accordance with regulations promulgated by the Administrator, and a public hearing has been held with opportunity for interested persons including representatives of the Administrator to appear and submit written or oral presentations on the air quality impact of such source, alternatives thereto, control technology requirements, and other appropriate considerations;

(3) the owner or operator of such facility demonstrates, as required pursuant to section 7410(j) of this title, that emissions from construction or operation of such facility will not cause, or contribute to, air pollution in excess of any (A) maximum allowable increase or maximum allowable concentration for any pollutant in any area to which this part applies more than one time per year, (B) national ambient air quality standard in any air quality control region, or (C) any other applicable emission standard or standard of performance under this chapter;

(4) the proposed facility is subject to the best available control technology for each pollutant subject to regulation under this chapter emitted from, or which results from, such facility;

(5) the provisions of subsection (d) of this section with respect to protection of class I areas have been complied with for such facility;

(6) there has been an analysis of any air quality impacts projected for the area as a result of growth associated with such facility;

(7) the person who owns or operates, or proposes to own or operate, a major emitting facility for which a permit is required under this part agrees to conduct such monitoring as may be necessary to determine the effect which emissions from any such facility may have, or is having, on air quality in any area which may be affected by emissions from such source; and

(8) in the case of a source which proposes to construct in a class III area, emissions from which would cause or contribute to exceeding the maximum allowable increments applicable in a class II area and where no standard under section 7411 of this title has been promulgated subsequent to August 7, 1977, for such source category, the Administrator has approved the determination of best available technology as set forth in the permit.

(b) Exception

The demonstration pertaining to maximum allowable increases required under subsection (a)(3) of this section shall not apply to maximum allowable increases for class II areas in the case of an expansion or modification of a major emitting facility which is in existence on August 7, 1977, whose allowable emissions of air pollutants, after compliance with subsection (a)(4) of this section, will be less than fifty tons per year and for which the owner or operator of such facility demonstrates that emissions of particulate matter and sulfur oxides will not cause or contribute to ambient air quality levels

in excess of the national secondary ambient air quality standard for either of such pollutants.

(c) Permit applications

Any completed permit application under section 7410 of this title for a major emitting facility in any area to which this part applies shall be granted or denied not later than one year after the date of filing of such completed application.

(d) Action taken on permit applications; notice; adverse impact on air quality related values; variance; emission limitations

(1) Each State shall transmit to the Administrator a copy of each permit application relating to a major emitting facility received by such State and provide notice to the Administrator of every action related to the consideration of such permit.

(2)(A) The Administrator shall provide notice of the permit application to the Federal Land Manager and the Federal official charged with direct responsibility for management of any lands within a class I area which may be affected by emissions from the proposed facility.

(B) The Federal Land Manager and the Federal official charged with direct responsibility for management of such lands shall have an affirmative responsibility to protect the air quality related values (including visibility) of any such lands within a class I area and to consider, in consultation with the Administrator, whether a proposed major emitting facility will have an adverse impact on such values.

(C)(i) In any case where the Federal official charged with direct responsibility for management of any lands within a class I area or the Federal Land Manager of such lands, or the Administrator, or the Governor of an adjacent State containing such a class I area files a notice alleging that emissions from a proposed major emitting facility may cause or contribute to a change in the air quality in such area and identifying the potential adverse impact of such change, a permit shall not be issued unless the owner or operator of such facility demonstrates that emissions of particulate matter and sulfur dioxide will not cause or contribute to concentrations which exceed the maximum allowable increases for a class I area.

(ii) In any case where the Federal Land Manager demonstrates to the satisfaction of the State that the emissions from such facility will have an adverse impact on the air quality-related values (including visibility) of such lands, notwithstanding the fact that the change in air quality resulting from emissions from such facility will not cause or contribute to concentrations which exceed the maximum allowable increases for a class I area, a permit shall not be issued.

(iii) In any case where the owner or operator of such facility demonstrates to the satisfaction of the Federal Land Manager, and the Federal Land Manager so certifies, that the emissions from such facility will have no adverse impact on the air quality-related values of such lands (including visibility), notwithstanding the fact that the change in air quality resulting from emissions from such facility will cause or contribute to concentrations which exceed the maximum allowable increases for class I areas, the

State may issue a permit.

(iv) In the case of a permit issued pursuant to clause (iii), such facility shall comply with such emission limitations under such permit as may be necessary to assure that emissions of sulfur oxides and particulates from such facility will not cause or contribute to concentrations of such pollutant which exceed the following maximum allowable increases over the baseline concentration for such pollutants:

	Maximum allowable increase (in micrograms per cubic meter)
Particulate matter:	
Annual geometric mean.....	19
Twenty-four-hour maximum	37
Sulfur dioxide:	
Annual arithmetic mean.....	20
Twenty-four-hour maximum	91
Three-hour maximum	325

(D)(i) In any case where the owner or operator of a proposed major emitting facility who has been denied a certification under subparagraph (C)(ii) demonstrates to the satisfaction of the Governor, after notice and public hearing, and the Governor finds, that the facility cannot be constructed by reason of any maximum allowable increase for sulfur dioxide for periods of twenty-four hours or less applicable to any class I area and, in the case of Federal mandatory class I areas, that a variance under this clause will not adversely affect the air quality related values of the area (including visibility), the Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may grant a variance from such maximum allowable increase. If such variance is granted, a permit may be issued to such source pursuant to the requirements of this subparagraph.

(ii) In any case in which the Governor recommends a variance under this subparagraph in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager shall be transmitted to the President. The President may approve the Governor's recommendation if he finds that such variance is in the national interest. No Presidential finding shall be reviewable in any court. The variance shall take effect if the President approves the Governor's recommendations. The President shall approve or disapprove such recommendation within ninety days after his receipt of the recommendations of the Governor and the Federal Land Manager.

(iii) In the case of a permit issued pursuant to this subparagraph, such facility shall comply with such emission limitations under such permit as may be necessary to assure that emissions of sulfur oxides from such facility will not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which exceed the following maximum allowable increases for such areas over the baseline concentration for such pollutant and to assure that such emissions will not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less on more than 18 days during any annual period:

MAXIMUM ALLOWABLE INCREASE
(In micrograms per cubic meter)

Period of exposure	Low terrain areas	High terrain areas
24-hr maximum	96	62
3-hr maximum	130	221

(iv) For purposes of clause (iii), the term "high terrain area" means with respect to any facility, any area having an elevation of 900 feet or more above the base of the stack of such facility, and the term "low terrain area" means any area other than a high terrain area.

(e) Analysis; continuous air quality monitoring data; regulations; model adjustments

(1) The review provided for in subsection (a) of this section shall be preceded by an analysis in accordance with regulations of the Administrator, promulgated under this subsection, which may be conducted by the State (or any general purpose unit of local government) or by the major emitting facility applying for such permit, of the ambient air quality at the proposed site and in areas which may be affected by emissions from such facility for each pollutant subject to regulation under this chapter which will be emitted from such facility.

(2) Effective one year after August 7, 1977, the analysis required by this subsection shall include continuous air quality monitoring data gathered for purposes of determining whether emissions from such facility will exceed the maximum allowable increases or the maximum allowable concentration permitted under this part. Such data shall be gathered over a period of one calendar year preceding the date of application for a permit under this part unless the State, in accordance with regulations promulgated by the Administrator, determines that a complete and adequate analysis for such purposes may be accomplished in a shorter period. The results of such analysis shall be available at the time of the public hearing on the application for such permit.

(3) The Administrator shall within six months after August 7, 1977, promulgate regulations respecting the analysis required under this subsection which regulations—

(A) shall not require the use of any automatic or uniform buffer zone or zones,

(B) shall require an analysis of the ambient air quality, climate and meteorology, terrain, soils and vegetation, and visibility at the site of the proposed major emitting facility and in the area potentially affected by the emissions from such facility for each pollutant regulated under this chapter which will be emitted from, or which results from the construction or operation of, such facility, the size and nature of the proposed facility, the degree of continuous emission reduction which could be achieved by such facility, and such other factors as may be relevant in determining the effect of emissions from a proposed facility on any air quality control region,

(C) shall require the results of such analysis shall be available at the time of the public hearing on the application for such permit, and

(D) shall specify with reasonable particularity each air quality model or models to be

used under specified sets of conditions for purposes of this part.

Any model or models designated under such regulations may be adjusted upon a determination, after notice and opportunity for public hearing, by the Administrator that such adjustment is necessary to take into account unique terrain or meteorological characteristics of an area potentially affected by emissions from a source applying for a permit required under this part.

(July 14, 1955, ch. 360, title I, § 165, as added Pub. L. 95-95, title I, § 127(a), Aug. 7, 1977, 91 Stat. 735; amended Pub. L. 95-190, § 14(a)(44)-(51), Nov. 16, 1977, 91 Stat. 1402.)

AMENDMENTS

1977—Subsec. (a)(1). Pub. L. 95-190, § 14(a)(44), substituted "part;" for "part."

Subsec. (a)(3). Pub. L. 95-190, § 14(a)(45), inserted provision making applicable requirement of section 7410(j) of this title.

Subsec. (b). Pub. L. 95-190, § 14(a)(46), inserted "cause or" before "contribute" and struck out "actual" before "allowable emissions".

Subsec. (d)(2)(C). Pub. L. 95-190, § 14(a)(47)-(49), in cl. (ii) substituted "contribute" for "contribute", in cl. (iii) substituted "quality-related" for "quality related" and "concentrations which" for "concentrations, which", and in cl. (iv) substituted "such facility" for "such sources" and "will not cause or contribute to concentrations of such pollutant which exceed" for "together with all other sources, will not exceed".

Subsec. (d)(2)(D). Pub. L. 95-190, § 14(a)(50), (51), in cl. (iii) substituted provisions relating to determinations of amounts of emissions of sulfur oxides from facilities, for provisions relating to determinations of amounts of emissions of sulfur oxides from sources operating under permits issued pursuant to this subpart, together with all other sources, and added cl. (iv).

§ 7476. Other pollutants

(a) Hydrocarbons, carbon monoxide, petrochemical oxidants, and nitrogen oxides

In the case of the pollutants hydrocarbons, carbon monoxide, photochemical oxidants, and nitrogen oxides, the Administrator shall conduct a study and not later than two years after August 7, 1977, promulgate regulations to prevent the significant deterioration of air quality which would result from the emissions of such pollutants. In the case of pollutants for which national ambient air quality standards are promulgated after August 7, 1977, he shall promulgate such regulations not more than 2 years after the date of promulgation of such standards.

(b) Effective date of regulations

Regulations referred to in subsection (a) of this section shall become effective one year after the date of promulgation. Within 21 months after such date of promulgation such plan revision shall be submitted to the Administrator who shall approve or disapprove the plan within 25 months after such date or¹ promulgation in the same manner as required under section 7410 of this title.

(c) Contents of regulations

Such regulations shall provide specific numerical measures against which permit applications

¹ So in original. Probably should be "or".

may be evaluated, a framework for stimulating improved control technology, protection of air quality values, and fulfill the goals and purposes set forth in section 7401 and section 7470 of this title.

(d) Specific measures to fulfill goals and purposes

The regulations of the Administrator under subsection (a) of this section shall provide specific measures at least as effective as the increments established in section 7473 of this title to fulfill such goals and purposes, and may contain air quality increments, emission density requirements, or other measures.

(e) Area classification plan not required

With respect to any air pollutant for which a national ambient air quality standard is established other than sulfur oxides or particulate matter, an area classification plan shall not be required under this section if the implementation plan adopted by the State and submitted for the Administrator's approval or promulgated by the Administrator under section 7410(c) of this title contains other provisions which when considered as a whole, the Administrator finds will carry out the purposes in section 7470 of this title at least as effectively as an area classification plan for such pollutant. Such other provisions referred to in the preceding sentence need not require the establishment of maximum allowable increases with respect to such pollutant for any area to which this section applies.

(f) PM-10 increments

The Administrator is authorized to substitute, for the maximum allowable increases in particulate matter specified in section 7473(b) of this title and section 7475(d)(2)(C)(iv) of this title, maximum allowable increases in particulate matter with an aerodynamic diameter smaller than or equal to 10 micrometers. Such substituted maximum allowable increases shall be of equal stringency in effect as those specified in the provisions for which they are substituted. Until the Administrator promulgates regulations under the authority of this subsection, the current maximum allowable increases in concentrations of particulate matter shall remain in effect.

(July 14, 1955, ch. 360, title I, § 166, as added Pub. L. 95-95, title I, § 127(a), Aug. 7, 1977, 91 Stat. 739; amended Pub. L. 101-549, title I, § 105(b), Nov. 15, 1990, 104 Stat. 2462.)

AMENDMENTS

1990—Subsec. (f). Pub. L. 101-549 added subsec. (f).

§ 7477. Enforcement

The Administrator shall, and a State may, take such measures, including issuance of an order, or seeking injunctive relief, as necessary to prevent the construction or modification of a major emitting facility which does not conform to the requirements of this part, or which is proposed to be constructed in any area designated pursuant to section 7407(d) of this title as attainment or unclassifiable and which is not subject to an implementation plan which meets the requirements of this part.

(July 14, 1955, ch. 360, title I, § 167, as added Pub. L. 95-95, title I, § 127(a), Aug. 7, 1977, 91 Stat. 740; amended Pub. L. 101-549, title I, § 110(3), title VII, § 708, Nov. 15, 1990, 104 Stat. 2470, 2684.)

AMENDMENTS

1990—Pub. L. 101-549, § 708, substituted "construction or modification of a major emitting facility" for "construction of a major emitting facility".

Pub. L. 101-549, § 110(3), substituted "designated pursuant to section 7407(d) as attainment or unclassifiable" for "included in the list promulgated pursuant to paragraph (1)(D) or (E) of subsection (d) of section 7407 of this title".

§ 7478. Period before plan approval

(a) Existing regulations to remain in effect

Until such time as an applicable implementation plan is in effect for any area, which plan meets the requirements of this part to prevent significant deterioration of air quality with respect to any air pollutant, applicable regulations under this chapter prior to August 7, 1977, shall remain in effect to prevent significant deterioration of air quality in any such area for any such pollutant except as otherwise provided in subsection (b) of this section.

(b) Regulations deemed amended; construction commenced after June 1, 1975

If any regulation in effect prior to August 7, 1977, to prevent significant deterioration of air quality would be inconsistent with the requirements of section 7472(a), section 7473(b) or section 7474(a) of this title, then such regulations shall be deemed amended so as to conform with such requirements. In the case of a facility on which construction was commenced (in accordance with the definition of "commenced" in section 7479(2) of this title) after June 1, 1975, and prior to August 7, 1977, the review and permitting of such facility shall be in accordance with the regulations for the prevention of significant deterioration in effect prior to August 7, 1977.

(July 14, 1955, ch. 360, title I, § 168, as added Pub. L. 95-95, title I, § 127(a), Aug. 7, 1977, 91 Stat. 740; amended Pub. L. 95-190, § 14(a)(52), Nov. 16, 1977, 91 Stat. 1402.)

AMENDMENTS

1977—Subsec. (b). Pub. L. 95-190 substituted "(in accordance with the definition of 'commenced' in section 7479(2) of this title)" for "in accordance with this definition".

§ 7479. Definitions

For purposes of this part—

(1) The term "major emitting facility" means any of the following stationary sources of air pollutants which emit, or have the potential to emit, one hundred tons per year or more of any air pollutant from the following types of stationary sources: fossil-fuel fired steam electric plants of more than two hundred and fifty million British thermal units per hour heat input, coal cleaning plants (thermal dryers), kraft pulp mills, Portland Cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging

more than fifty tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production facilities, chemical process plants, fossil-fuel boilers of more than two hundred and fifty million British thermal units per hour heat input, petroleum storage and transfer facilities with a capacity exceeding three hundred thousand barrels, taconite ore processing facilities, glass fiber processing plants, charcoal production facilities. Such term also includes any other source with the potential to emit two hundred and fifty tons per year or more of any air pollutant. This term shall not include new or modified facilities which are nonprofit health or education institutions which have been exempted by the State.

(2)(A) The term "commenced" as applied to construction of a major emitting facility means that the owner or operator has obtained all necessary preconstruction approvals or permits required by Federal, State, or local air pollution emissions and air quality laws or regulations and either has (i) begun, or caused to begin, a continuous program of physical on-site construction of the facility or (ii) entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of construction of the facility to be completed within a reasonable time.

(B) The term "necessary preconstruction approvals or permits" means those permits or approvals, required by the permitting authority as a precondition to undertaking any activity under clauses (i) or (ii) of subparagraph (A) of this paragraph.

(C) The term "construction" when used in connection with any source or facility, includes the modification (as defined in section 7411(a) of this title) of any source or facility.

(3) The term "best available control technology" means an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this chapter emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of "best available control technology" result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard established pursuant to section 7411 or 7412 of this title. Emissions from any source utilizing clean fuels, or any other means, to comply with this paragraph shall not be allowed to increase above levels that would have been required under this paragraph as it existed prior to November 15, 1990.

(4) The term "baseline concentration" means, with respect to a pollutant, the ambient concentration levels which exist at the time of the first application for a permit in an area subject to this part, based on air quality data available in the Environmental Protection Agency or a State air pollution control agency and on such monitoring data as the permit applicant is required to submit. Such ambient concentration levels shall take into account all projected emissions in, or which may affect, such area from any major emitting facility on which construction commenced prior to January 6, 1975, but which has not begun operation by the date of the baseline air quality concentration determination. Emissions of sulfur oxides and particulate matter from any major emitting facility on which construction commenced after January 6, 1975, shall not be included in the baseline and shall be counted against the maximum allowable increases in pollutant concentrations established under this part.

(July 14, 1955, ch. 360, title I, § 169, as added Pub. L. 95-95, title I, § 127(a), Aug. 7, 1977, 91 Stat. 740; amended Pub. L. 95-190, § 14(a)(54), Nov. 16, 1977, 91 Stat. 1402; Pub. L. 101-549, title III, § 305(b), title IV, § 403(d), Nov. 15, 1990, 104 Stat. 2583, 2631.)

AMENDMENTS

1990—Par. (1). Pub. L. 101-549, § 305(b), struck out "two hundred and" after "municipal incinerators capable of charging more than".

Par. (3). Pub. L. 101-549, § 403(d), directed the insertion of "clean fuels," after "including fuel cleaning," which was executed by making the insertion after "including fuel cleaning" to reflect the probable intent of Congress, and inserted at end "Emissions from any source utilizing clean fuels, or any other means, to comply with this paragraph shall not be allowed to increase above levels that would have been required under this paragraph as it existed prior to November 15, 1990."

1977—Par. (2)(C). Pub. L. 95-190 added subpar. (C).

STUDY OF MAJOR EMITTING FACILITIES WITH POTENTIAL OF EMITTING 250 TONS PER YEAR

Section 127(b) of Pub. L. 95-95 directed Administrator, within 1 year after Aug. 7, 1977, to report to Congress on consequences of that portion of definition of "major emitting facility" under this subpart which applies to facilities with potential to emit 250 tons per year or more.

SUBPART II—VISIBILITY PROTECTION

CODIFICATION

As originally enacted, subpart II of part C of subchapter I of this chapter was added following section 7478 of this title. Pub. L. 95-190, § 14(a)(53), Nov. 16, 1977, 91 Stat. 1402, struck out subpart II and inserted such subpart following section 7479 of this title.

§ 7491. Visibility protection for Federal class I areas

(a) Impairment of visibility; list of areas; study and report

(1) Congress hereby declares as a national goal the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory class I Federal areas which impairment results from manmade air pollution.

SEC. 2. *Designation of Facilities.* (a) The Administrator of the Environmental Protection Agency (hereinafter referred to as "the Administrator") shall be responsible for the attainment of the purposes and objectives of this Order.

(b) In carrying out his responsibilities under this Order, the Administrator shall, in conformity with all applicable requirements of law, designate facilities which have given rise to a conviction for an offense under section 113(c)(1) of the Air Act [42 U.S.C. 7413(c)(1)] or section 309(c) of the Water Act [33 U.S.C. 1319(c)]. The Administrator shall, from time to time, publish and circulate to all Federal agencies lists of those facilities, together with the names and addresses of the persons who have been convicted of such offenses. Whenever the Administrator determines that the condition which gave rise to a conviction has been corrected, he shall promptly remove the facility and the name and address of the person concerned from the list.

SEC. 3. *Contracts, Grants, or Loans.* (a) Except as provided in section 8 of this Order, no Federal agency shall enter into any contract for the procurement of goods, materials, or services which is to be performed in whole or in part in a facility then designated by the Administrator pursuant to section 2.

(b) Except as provided in section 8 of this Order, no Federal agency authorized to extend Federal assistance by way of grant, loan, or contract shall extend such assistance in any case in which it is to be used to support any activity or program involving the use of a facility then designated by the Administrator pursuant to section 2.

SEC. 4. *Procurement, Grant, and Loan Regulations.* The Federal Procurement Regulations, the Armed Services Procurement Regulations, and to the extent necessary, any supplemental or comparable regulations issued by any agency of the Executive Branch shall, following consultation with the Administrator, be amended to require, as a condition of entering into, renewing, or extending any contract for the procurement of goods, materials, or services or extending any assistance by way of grant, loan, or contract, inclusion of a provision requiring compliance with the Air Act, the Water Act, and standards issued pursuant thereto in the facilities in which the contract is to be performed, or which are involved in the activity or program to receive assistance.

SEC. 5. *Rules and Regulations.* The Administrator shall issue such rules, regulations, standards, and guidelines as he may deem necessary or appropriate to carry out the purposes of this Order.

SEC. 6. *Cooperation and Assistance.* The head of each Federal agency shall take such steps as may be necessary to insure that all officers and employees of this agency whose duties entail compliance or comparable functions with respect to contracts, grants, and loans are familiar with the provisions of this Order. In addition to any other appropriate action, such officers and employees shall report promptly any condition in a facility which may involve noncompliance with the Air Act or the Water Act or any rules, regulations, standards, or guidelines issued pursuant to this Order to the head of the agency, who shall transmit such reports to the Administrator.

SEC. 7. *Enforcement.* The Administrator may recommend to the Department of Justice or other appropriate agency that legal proceedings be brought or other appropriate action be taken whenever he becomes aware of a breach of any provision required, under the amendments issued pursuant to section 4 of this Order, to be included in a contract or other agreement.

SEC. 8. *Exemptions—Reports to Congress.* (a) Upon a determination that the paramount interest of the United States so requires—

(1) The head of a Federal agency may exempt any contract, grant, or loan, and, following consultation with the Administrator, any class of contracts, grants or loans from the provisions of this Order. In any such case, the head of the Federal agency granting such ex-

emption shall (A) promptly notify the Administrator of such exemption and the justification therefor; (B) review the necessity for each such exemption annually; and (C) report to the Administrator annually all such exemptions in effect. Exemptions granted pursuant to this section shall be for a period not to exceed one year. Additional exemptions may be granted for periods not to exceed one year upon the making of a new determination by the head of the Federal agency concerned.

(2) The Administrator may, by rule or regulation, exempt any or all Federal agencies from any or all of the provisions of this Order with respect to any class or classes of contracts, grants, or loans, which (A) involve less than specified dollar amounts, or (B) have a minimal potential impact upon the environment, or (C) involve persons who are not prime contractors or direct recipients of Federal assistance by way of contracts, grants, or loans.

(b) Federal agencies shall reconsider any exemption granted under subsection (a) whenever requested to do so by the Administrator.

(c) The Administrator shall annually notify the President and the Congress of all exemptions granted, or in effect, under this Order during the preceding year.

SEC. 9. *Related Actions.* The imposition of any sanction or penalty under or pursuant to this Order shall not relieve any person of any legal duty to comply with any provisions of the Air Act or the Water Act.

SEC. 10. *Applicability.* This Order shall not apply to contracts, grants, or loans involving the use of facilities located outside the United States.

SEC. 11. *Uniformity.* Rules, regulations, standards, and guidelines issued pursuant to this order and section 508 of the Water Act [33 U.S.C. 1368] shall, to the maximum extent feasible, be uniform with regulations issued pursuant to this order, Executive Order No. 11602 of June 28, 1971 [formerly set out above], and section 306 of the Air Act [this section].

SEC. 12. *Order Superseded.* Executive Order No. 11602 of June 29, 1971, is hereby superseded.

RICHARD NIXON.

§ 7607. Administrative proceedings and judicial review

(a) Administrative subpoenas; confidentiality; witnesses

In connection with any determination under section 7410(f) of this title, or for purposes of obtaining information under section 7521(b)(4)¹ or 7545(c)(3) of this title, any investigation, monitoring, reporting requirement, entry, compliance inspection, or administrative enforcement proceeding under the² chapter (including but not limited to section 7413, section 7414, section 7420, section 7429, section 7477, section 7524, section 7525, section 7542, section 7603, or section 7606 of this title),³ the Administrator may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and he may administer oaths. Except for emission data, upon a showing satisfactory to the Administrator by such owner or operator that such papers, books, documents, or information or particular part thereof, if made public, would divulge trade secrets or secret processes of such owner or operator, the Administrator shall consider such record, report, or information or particular portion thereof confidential in accordance with the purposes of section 1905 of title 18, except that such paper, book, document, or information may be dis-

¹ See References in Text note below.

² So in original. Probably should be "this".

³ So in original.

closed to other officers, employees, or authorized representatives of the United States concerned with carrying out this chapter, to persons carrying out the National Academy of Sciences' study and investigation provided for in section 7521(c) of this title, or when relevant in any proceeding under this chapter. Witnesses summoned shall be paid the same fees and mileage that are paid witnesses in the courts of the United States. In case of contumacy or refusal to obey a subpoena served upon any person under this subparagraph,⁴ the district court of the United States for any district in which such person is found or resides or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony before the Administrator to appear and produce papers, books, and documents before the Administrator, or both, and any failure to obey such order of the court may be punished by such court as a contempt thereof.

(b) Judicial review

(1) A petition for review of action of the Administrator in promulgating any national primary or secondary ambient air quality standard, any emission standard or requirement under section 7412 of this title, any standard of performance or requirement under section 7411 of this title, any standard under section 7521 of this title (other than a standard required to be prescribed under section 7521(b)(1) of this title), any determination under section 7521(b)(5)⁵ of this title, any control or prohibition under section 7545 of this title, any standard under section 7571 of this title, any rule issued under section 7413, 7419, or under section 7420 of this title, or any other nationally applicable regulations promulgated, or final action taken, by the Administrator under this chapter may be filed only in the United States Court of Appeals for the District of Columbia. A petition for review of the Administrator's action in approving or promulgating any implementation plan under section 7410 of this title or section 7411(d) of this title, any order under section 7411(j) of this title, under section 7412 of this title,⁶ under section 7419 of this title, or under section 7420 of this title, or his action under section 1857c-10 (c)(2)(A), (B), or (C) of this title (as in effect before August 7, 1977) or under regulations thereunder, or revising regulations for enhanced monitoring and compliance certification programs under section 7414(a)(3) of this title, or any other final action of the Administrator under this chapter (including any denial or disapproval by the Administrator under subchapter I of this chapter) which is locally or regionally applicable may be filed only in the United States Court of Appeals for the appropriate circuit. Notwithstanding the preceding sentence a petition for review of any action referred to in such sentence may be filed only in the United States Court of Appeals for the District of Columbia if such action is based on a determination of nationwide

scope or effect and if in taking such action the Administrator finds and publishes that such action is based on such a determination. Any petition for review under this subsection shall be filed within sixty days from the date notice of such promulgation, approval, or action appears in the Federal Register, except that if such petition is based solely on grounds arising after such sixtieth day, then any petition for review under this subsection shall be filed within sixty days after such grounds arise. The filing of a petition for reconsideration by the Administrator of any otherwise final rule or action shall not affect the finality of such rule or action for purposes of judicial review nor extend the time within which a petition for judicial review of such rule or action under this section may be filed, and shall not postpone the effectiveness of such rule or action.

(2) Action of the Administrator with respect to which review could have been obtained under paragraph (1) shall not be subject to judicial review in civil or criminal proceedings for enforcement. Where a final decision by the Administrator defers performance of any nondiscretionary statutory action to a later time, any person may challenge the deferral pursuant to paragraph (1).

(c) Additional evidence

In any judicial proceeding in which review is sought of a determination under this chapter required to be made on the record after notice and opportunity for hearing, if any party applies to the court for leave to adduce additional evidence, and shows to the satisfaction of the court that such additional evidence is material and that there were reasonable grounds for the failure to adduce such evidence in the proceeding before the Administrator, the court may order such additional evidence (and evidence in rebuttal thereof) to be taken before the Administrator, in such manner and upon such terms and conditions as to⁷ the court may deem proper. The Administrator may modify his findings as to the facts, or make new findings, by reason of the additional evidence so taken and he shall file such modified or new findings, and his recommendation, if any, for the modification or setting aside of his original determination, with the return of such additional evidence.

(d) Rulemaking

(1) This subsection applies to—

(A) the promulgation or revision of any national ambient air quality standard under section 7409 of this title,

(B) the promulgation or revision of an implementation plan by the Administrator under section 7410(c) of this title,

(C) the promulgation or revision of any standard of performance under section 7411 of this title, or emission standard or limitation under section 7412(d) of this title, any standard under section 7412(f) of this title, or any regulation under section 7412(g)(1)(D) and (F) of this title, or any regulation under section 7412(m) or (n) of this title,

(D) the promulgation of any requirement for solid waste combustion under section 7429 of this title,

⁴So in original. Probably should be "subsection."

⁵See References in Text note below.

⁶So in original.

⁷So in original. The word "to" probably should not appear.

(e) Temporary sources

The permitting authority may issue a single permit authorizing emissions from similar operations at multiple temporary locations. No such permit shall be issued unless it includes conditions that will assure compliance with all the requirements of this chapter at all authorized locations, including, but not limited to, ambient standards and compliance with any applicable increment or visibility requirements under part C of subchapter I of this chapter. Any such permit shall in addition require the owner or operator to notify the permitting authority in advance of each change in location. The permitting authority may require a separate permit fee for operations at each location.

(f) Permit shield

Compliance with a permit issued in accordance with this subchapter shall be deemed compliance with section 7661a of this title. Except as otherwise provided by the Administrator by rule, the permit may also provide that compliance with the permit shall be deemed compliance with other applicable provisions of this chapter that relate to the permittee if—

- (1) the permit includes the applicable requirements of such provisions, or
- (2) the permitting authority in acting on the permit application makes a determination relating to the permittee that such other provisions (which shall be referred to in such determination) are not applicable and the permit includes the determination or a concise summary thereof.

Nothing in the preceding sentence shall alter or affect the provisions of section 7603 of this title, including the authority of the Administrator under that section.

(July 14, 1955, ch. 360, title V, § 504, as added Pub. L. 101-549, title V, § 501, Nov. 15, 1990, 104 Stat. 2642.)

§ 7661d. Notification to Administrator and contiguous States**(a) Transmission and notice****(1) Each permitting authority—**

(A) shall transmit to the Administrator a copy of each permit application (and any application for a permit modification or renewal) or such portion thereof, including any compliance plan, as the Administrator may require to effectively review the application and otherwise to carry out the Administrator's responsibilities under this chapter, and

(B) shall provide to the Administrator a copy of each permit proposed to be issued and issued as a final permit.

(2) The permitting authority shall notify all States—

(A) whose air quality may be affected and that are contiguous to the State in which the emission originates, or

(B) that are within 50 miles of the source,

of each permit application or proposed permit forwarded to the Administrator under this section, and shall provide an opportunity for such States to submit written recommendations respecting the issuance of the permit and its

terms and conditions. If any part of those recommendations are not accepted by the permitting authority, such authority shall notify the State submitting the recommendations and the Administrator in writing of its failure to accept those recommendations and the reasons therefor.

(b) Objection by EPA

(1) If any permit contains provisions that are determined by the Administrator as not in compliance with the applicable requirements of this chapter, including the requirements of an applicable implementation plan, the Administrator shall, in accordance with this subsection, object to its issuance. The permitting authority shall respond in writing if the Administrator (A) within 45 days after receiving a copy of the proposed permit under subsection (a)(1) of this section, or (B) within 45 days after receiving notification under subsection (a)(2) of this section, objects in writing to its issuance as not in compliance with such requirements. With the objection, the Administrator shall provide a statement of the reasons for the objection. A copy of the objection and statement shall be provided to the applicant.

(2) If the Administrator does not object in writing to the issuance of a permit pursuant to paragraph (1), any person may petition the Administrator within 60 days after the expiration of the 45-day review period specified in paragraph (1) to take such action. A copy of such petition shall be provided to the permitting authority and the applicant by the petitioner. The petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting agency (unless the petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period). The petition shall identify all such objections. If the permit has been issued by the permitting agency, such petition shall not postpone the effectiveness of the permit. The Administrator shall grant or deny such petition within 60 days after the petition is filed. The Administrator shall issue an objection within such period if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of this chapter, including the requirements of the applicable implementation plan. Any denial of such petition shall be subject to judicial review under section 7607 of this title. The Administrator shall include in regulations under this subchapter provisions to implement this paragraph. The Administrator may not delegate the requirements of this paragraph.

(3) Upon receipt of an objection by the Administrator under this subsection, the permitting authority may not issue the permit unless it is revised and issued in accordance with subsection (c) of this section. If the permitting authority has issued a permit prior to receipt of an objection by the Administrator under paragraph (2) of this subsection, the Administrator shall modify, terminate, or revoke such permit and the permitting authority may thereafter only issue a

revised permit in accordance with subsection (c) of this section.

(c) Issuance or denial

If the permitting authority fails, within 90 days after the date of an objection under subsection (b) of this section, to submit a permit revised to meet the objection, the Administrator shall issue or deny the permit in accordance with the requirements of this subchapter. No objection shall be subject to judicial review until the Administrator takes final action to issue or deny a permit under this subsection.

(d) Waiver of notification requirements

(1) The Administrator may waive the requirements of subsections (a) and (b) of this section at the time of approval of a permit program under this subchapter for any category (including any class, type, or size within such category) of sources covered by the program other than major sources.

(2) The Administrator may, by regulation, establish categories of sources (including any class, type, or size within such category) to which the requirements of subsections (a) and (b) of this section shall not apply. The preceding sentence shall not apply to major sources.

(3) The Administrator may exclude from any waiver under this subsection notification under subsection (a)(2) of this section. Any waiver granted under this subsection may be revoked or modified by the Administrator by rule.

(e) Refusal of permitting authority to terminate, modify, or revoke and reissue

If the Administrator finds that cause exists to terminate, modify, or revoke and reissue a permit under this subchapter, the Administrator shall notify the permitting authority and the source of the Administrator's finding. The permitting authority shall, within 90 days after receipt of such notification, forward to the Administrator under this section a proposed determination of termination, modification, or revocation and reissuance, as appropriate. The Administrator may extend such 90 day period for an additional 90 days if the Administrator finds that a new or revised permit application is necessary, or that the permitting authority must require the permittee to submit additional information. The Administrator may review such proposed determination under the provisions of subsections (a) and (b) of this section. If the permitting authority fails to submit the required proposed determination, or if the Administrator objects and the permitting authority fails to resolve the objection within 90 days, the Administrator may, after notice and in accordance with fair and reasonable procedures, terminate, modify, or revoke and reissue the permit.

(July 14, 1955, ch. 360, title V, § 505, as added Pub. L. 101-549, title V, § 501, Nov. 15, 1990, 104 Stat. 2643.)

§ 7661e. Other authorities

(a) In general

Nothing in this subchapter shall prevent a State, or interstate permitting authority, from establishing additional permitting requirements not inconsistent with this chapter.

(b) Permits implementing acid rain provisions

The provisions of this subchapter, including provisions regarding schedules for submission and approval or disapproval of permit applications, shall apply to permits implementing the requirements of subchapter IV-A of this chapter except as modified by that subchapter.

(July 14, 1955, ch. 360, title V, § 506, as added Pub. L. 101-549, title V, § 501, Nov. 15, 1990, 104 Stat. 2645.)

§ 7661f. Small business stationary source technical and environmental compliance assistance program

(a) Plan revisions

Consistent with sections 7410 and 7412 of this title, each State shall, after reasonable notice and public hearings, adopt and submit to the Administrator as part of the State implementation plan for such State or as a revision to such State implementation plan under section 7410 of this title, plans for establishing a small business stationary source technical and environmental compliance assistance program. Such submission shall be made within 24 months after November 15, 1990. The Administrator shall approve such program if it includes each of the following:

(1) Adequate mechanisms for developing, collecting, and coordinating information concerning compliance methods and technologies for small business stationary sources, and programs to encourage lawful cooperation among such sources and other persons to further compliance with this chapter.

(2) Adequate mechanisms for assisting small business stationary sources with pollution prevention and accidental release detection and prevention, including providing information concerning alternative technologies, process changes, products, and methods of operation that help reduce air pollution.

(3) A designated State office within the relevant State agency to serve as ombudsman for small business stationary sources in connection with the implementation of this chapter.

(4) A compliance assistance program for small business stationary sources which assists small business stationary sources in determining applicable requirements and in receiving permits under this chapter in a timely and efficient manner.

(5) Adequate mechanisms to assure that small business stationary sources receive notice of their rights under this chapter in such manner and form as to assure reasonably adequate time for such sources to evaluate compliance methods and any relevant or applicable proposed or final regulation or standard issued under this chapter.

(6) Adequate mechanisms for informing small business stationary sources of their obligations under this chapter, including mechanisms for referring such sources to qualified auditors or, at the option of the State, for providing audits of the operations of such sources to determine compliance with this chapter.

(7) Procedures for consideration of requests from a small business stationary source for modification of—

Wis. Adm. Code s NR 405.02

Wis. Admin. Code s NR 405. 02

WISCONSIN ADMINISTRATIVE CODE
DEPARTMENT OF NATURAL RESOURCES
CHAPTER NR 405. PREVENTION OF SIGNIFICANT DETERIORATION
Current through Reg. No. 588 (December 2004)

NR 405.02 Definitions.

The definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter:

(1) "Actual emissions" means the actual rate of emissions of an air contaminant from an emissions unit, as determined in accordance with pars. (a) through (d):

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the air contaminant during a 2-year period which precedes the particular date and which is representative of normal source operation. The department may allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.

(b) The department may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit unless reliable data are available which demonstrate that the actual emissions are different than the source-specific allowable emissions.

(c) For any emissions unit, other than an electric utility steam generating unit, which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

(d) For an electric utility steam generating unit, other than a new unit or the replacement of an existing unit, actual emissions of the unit following the physical or operational change shall equal the representative actual annual emissions of the unit, provided the source owner or operator maintains and submits to the department, on an annual basis for a period of 5 years from the date the unit resumes regular operation, information demonstrating that the physical or operational change did not result in an emissions increase. A longer period, not to exceed 10 years, may be required by the department if the department determines such a period to be more representative of normal source post-change operations.

(2) "Allowable emissions" means the emissions rate of a stationary source calculated using the maximum rated capacity of the source, unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both, and the most stringent of the following:

(a) The applicable standards as set forth in chs. NR 440 and 445 to 449 and under sections 111 and 112 of the Act (42 USC 7411 and 7412).

(b) The applicable emissions limitations, as set forth in chs. NR 400 to 499.

(c) The emissions rate specified as a federally enforceable permit condition.

(3) "Baseline area" means any intrastate area, and every part thereof, designated as attainment or unclassifiable under section 107 (d) (1) (D) or (E) of the Act (42 USC 7407 (d) (1) (D) or (E)) in which the major source or major modification establishing

the minor source baseline date would construct or would have an air quality impact equal to or greater than $1 \mu\text{g}/\text{m}^3$ (annual average) of the air contaminant for which the minor source baseline date is established. Area redesignations under section 107 (d) (1) (D) or (E) of the Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which either establishes a minor source baseline date or is subject to this chapter.

(4) (a) "Baseline concentration" means that ambient concentration level which exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each air contaminant for which a minor source baseline date is established and shall include:

1. The actual emissions representative of sources in existence on the applicable minor source baseline date, except as provided in par. (b).
2. The allowable emissions of major stationary sources which commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.

(b) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increases:

1. Actual emissions from any major stationary source on which construction commenced after the major source baseline date.
2. Actual emissions increases and decreases at any stationary source occurring after the minor source baseline date.

(6) "Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework and construction of permanent storage structures. With respect to a change in method of operation, this term refers to those on-site activities, other than preparatory activities, which mark the initiation of the change.

(7) "Best available control technology" or "BACT" means an emissions limitation, including a visible emissions standard, based on the maximum degree of reduction for each air contaminant subject to regulation under the Act which would be emitted from any proposed major stationary source or major modification which the department, on a case-by-case basis, taking into account energy, environmental, and economic impacts, and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including clean fuels, fuel cleaning or treatment or innovative fuel combination techniques for control of the air contaminant. In no event may application of best available control technology result in emissions of any air contaminant which would exceed the emissions allowed by any applicable standard under chs. NR 440 and 445 to 449 and under sections 111 and 112 of the Act (42 USC 7411 and 7412). Emissions from any source utilizing clean fuels or any other means to comply with this subsection may not be allowed to increase above the levels that would have been required under this subsection as it existed prior to enactment of the 1990 clean air Act amendments on November 15, 1990. If the department determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. The standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(8) "Building, structure, facility or installation" or "facility, building, structure, equipment, vehicle or action" means all of the air contaminant emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Air contaminant emitting activities shall be considered as part of the same industrial grouping if they are classified under the same 2-digit major group as described in the Standard Industrial Classification Manual, 1987, incorporated by reference in S. NR 484.05.

(8m) "Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of sulfur dioxide or

oxides of nitrogen associated with the utilization of coal in the generation of electricity, or process steam, which was not in widespread use as of November 15, 1990.

(8s) "Clean coal technology demonstration project" means a project using funds appropriated under the heading 'Department of Energy-Clean Coal Technology', up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the U.S. environmental protection agency. The federal contribution for a qualifying project shall be at least 20% of the total cost of the demonstration project.

(9) "Commence" as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and has done one of the following:

(a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time.

(b) Entered into binding agreements or contractual obligations, which cannot be canceled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(10) "Complete" means, in reference to an application for a permit, that the application contains all the information necessary for processing the application. Designating an application complete for purposes of permit processing does not preclude the department from requesting or accepting any additional information.

(11) "Construction" means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) which would result in a change in actual emissions.

(11m) "Electric utility steam generating unit" means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

(12) "Emissions unit" means any part of a stationary source which emits or would have the potential to emit any air contaminant subject to regulation under the act.

(13) "Federal land manager" means, with respect to any lands in the United States, the secretary of the department with authority over such lands.

(15) "Fugitive emissions" means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(16) "High terrain" means any area having an elevation 900 feet or more above the base of the stack of a source.

(17) "Indian governing body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

(18) "Indian reservation" means any federally recognized reservation established by treaty, agreement, executive order, or act of congress.

(19) "Innovative control technology" means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.

(20) "Low terrain" means any area other than high terrain.

(21) "Major modification" means any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any air contaminant subject to regulation under the act.

(a) Any net emissions increase that is significant for volatile organic compounds shall be considered significant for ozone.

(b) A physical change or change in the method of operation does not include:

1. Routine maintenance, repair, and replacement.
 2. Use of an alternative fuel or raw material by reason of any order under sections 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (15 USC 791 to 798) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act (16 USC 791a to 828c).
 3. Use of an alternative fuel by reason of an order or rule under section 125 of the Act (42 USC 7425).
 4. Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste.
 5. Use of an alternative fuel or raw material by a stationary source when one of the following applies:
 - a. The source was capable of accommodating the alternative fuel or raw material before January 6, 1975, unless the change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to this chapter or ch. NR 406 or 408 or under an operation permit issued pursuant to ch. NR 407.
 - b. The source is approved to use the alternative fuel or raw material under any permit issued under this chapter or ch. NR 406, 407 or 408.
 6. An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to this chapter, ch. NR 406 or 408 or 40 CFR 52.21 or under an operation permit issued pursuant to ch. NR 407.
 7. Any change in ownership at a stationary source.
 8. The addition, replacement or use of a pollution control project at an existing electric utility steam generating unit, unless the department determines that the addition, replacement or use renders the unit less environmentally beneficial, or except when the department determines both of the following:
 - a. There is reason to believe that the pollution control project would result in a significant net increase in representative actual annual emissions of any pollutant for which a national ambient air quality standard has been adopted over levels used for that source in the most recent air quality impact analysis in the area conducted for the purpose of title I of the Act (42 USC 7401 to 7515), if any.
 - b. The increase will cause or contribute to a violation of any national ambient air quality standard or air quality increment, or visibility limitation.
 9. The installation, operation, cessation or removal of a temporary clean coal technology demonstration project, provided that the project complies with both of the following:
 - a. The state implementation plan.
 - b. Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.
 10. The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.
 11. The reactivation of a very clean coal-fired electric utility steam generating unit.
- (21m)** "Major source baseline date" means:
- (a) In the case of particulate matter and sulfur dioxide. January 6, 1975.
 - (b) In the case of nitrogen dioxide. February 8, 1988.
- (22)** (a) "Major stationary source" means:
1. Any of the following stationary sources of air contaminants which emits, or has the potential to emit, 100 tons per year or more of any air contaminant subject to regulation under the act: Fossil fuel fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants.

petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants.

2. Notwithstanding the stationary source size specified in subd. 1., any stationary source which emits, or has the potential to emit, 250 tons per year or more of any air contaminant subject to regulation under the act.

3. Any physical change that would occur at a stationary source not otherwise qualifying under this subsection as a major stationary source, if the change would constitute a major stationary source by itself.

(b) A major source that is major for volatile organic compounds shall be considered major for ozone.

(c) Volatile organic compounds exclude the compounds listed under s. NR 400.02 (162) unless the compound is subject to an emission limitation under chs. NR 440 and 447 to 449 and subch. III of ch. NR 446.

(d) Mobile source emissions indirectly caused by a source which attracts mobile source activity may not be considered in determining whether the source is a major stationary source for the purposes of this chapter.

(22m) (a) "Minor source baseline date" means the earliest date after the trigger date on which the owner or operator of a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulations. The trigger date is:

1. In the case of particulate matter and sulfur dioxide, August 7, 1977.

2. In the case of nitrogen dioxide, February 8, 1988.

(b) The minor source baseline date is established for each air contaminant for which increments or other equivalent measures have been established if:

1. The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107 (d) (1) (D) or (E) of the Act (42 USC 7407(d)(1)(D) or (E)) for the air contaminant on the date of its complete application under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166.

2. In the case of a major stationary source, the air contaminant would be emitted in significant amounts or, in the case of a major modification, there would be a significant net emissions increase of the air contaminant.

(23) "Necessary preconstruction approvals or permits" means those permits or approvals required under chs. NR 400 to 499.

(24) (a) "Net emissions increase" means the amount by which the sum of the following exceeds zero:

1. Any increase in actual emissions from a particular physical change or change in the method of operation at a stationary source.

2. Any other increases and decreases in actual emissions at the source that are contemporaneous with the particular change and are otherwise creditable.

(b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between the following:

1. The date 5 years before construction on the particular change commences.

2. The date that the increase from the particular change occurs.

(c) An increase or decrease in actual emissions is creditable only if the reviewing authority has not relied on it in issuing a permit for the source under this chapter, which permit is in effect when the increase in actual emissions from the particular change occurs.

(d) An increase or decrease in actual emissions of sulfur dioxide, nitrogen oxides or particulate matter measured as PM₁₀ which occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

(e) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(f) A decrease in actual emissions is creditable only to the extent that:

1. The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions.
2. It is federally enforceable at and after the time that actual construction on the particular change begins.
3. It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.

(g) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

(24m) "Pollution control project" means any activity or project undertaken at an existing electric utility steam generating unit for purposes of reducing emissions from the unit. Activities or projects are limited to the following:

- (a) The installation of conventional or innovative pollution control technology, including but not limited to advanced flue gas desulfurization, sorbent injection for sulfur dioxide and nitrogen oxides controls and electrostatic precipitators.
- (b) An activity or project to accommodate switching to a fuel which is less polluting than the fuel in use prior to the activity or project, including, but not limited to, natural gas or coal re-burning, or the co-firing of natural gas and other fuels for the purpose of controlling emissions.

(c) A permanent clean coal technology demonstration project conducted under title II, section 101 (d) of the Further Continuing Appropriations Act of 1985 (42 USC 5903 (d)), or subsequent appropriations, up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the U.S. environmental protection agency.

(d) A permanent clean coal technology demonstration project that constitutes a repowering project.

(25) "Potential to emit" means the maximum capacity of a stationary source to emit an air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit an air contaminant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

(25g) "Reactivation of a very clean coal-fired electric utility steam generating unit" means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit meets all of the following criteria:

- (a) It has not been in operation for the 2-year period prior to the enactment of the clean air Act amendments of 1990 on November 15, 1990, and the emissions from the unit continue to be carried in the department's emissions inventory at the time of enactment.
- (b) It was as equipped prior to shutdown with a continuous system of emissions control that achieves a removal efficiency for sulfur dioxide of no less than 85% and a removal efficiency for particulates of no less than 98%.
- (c) It is equipped with low-NO_x burners prior to the time of commencement of operations following reactivation.
- (d) It is otherwise in compliance with the requirements of the act.

(25m) (a) "Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the administrator, in consultation with the federal secretary of energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.

(b) Repowering shall also include any unit fired by oil or gas or both which has been awarded clean coal technology demon-

stration funding as of January 1, 1991, by the federal department of energy.

(c) The department shall give expedited consideration to permit applications for any source that satisfies the requirements of this subsection and is granted an extension under section 409 of the Act (42 USC 7651h).

(25s) "Representative actual annual emissions" means the average rate, in tons per year, at which the source is projected to emit a pollutant for the 2-year period after a physical change or change in the method of operation of a unit, or a different consecutive 2-year period within 10 years after that change, where the department determines that such period is more representative of normal source operations, considering the effect any such change will have on increasing or decreasing the hourly emissions rate and on projected capacity utilization. In projecting future emissions the department shall:

(a) Consider all relevant information, including but not limited to, historical operational data, the company's own representations, filings with the state or federal regulatory authorities, and compliance plans under title IV of the act.

(b) Exclude, in calculating any increase in emissions that results from the particular physical change or change in the method of operation at an electric utility steam generating unit, that portion of the unit's emissions following the change that could have been accommodated during the representative baseline period and is attributable to an increase in projected capacity utilization at the unit that is unrelated to the particular change, including any increased utilization due to the rate of electricity demand growth for the utility system as a whole.

(26) "Secondary emissions" means emissions which occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. For the purposes of this chapter, secondary emissions must be specific, well defined, quantifiable, and impact the same general areas as the stationary source or modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

(27) (a) "Significant" means, in reference to a net emissions increase or the potential of a source to emit any of the air contaminants in Table A, a rate of emissions that would equal or exceed any of the rates in Table A.

Table A Pollutant and Emissions Rate

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1. Carbon monoxide: 100 tons per year (tpy)
 2. Nitrogen oxides: 40 tpy
 3. Sulfur dioxide: 40 tpy
 4. Particulate matter: 25 tpy
 5. PM₁₀: 15 tpy
 6. Ozone: 40 tpy of volatile organic compounds
 7. Lead: 0.60 tpy
 8. Mercury: 0.10 tpy
 9. Fluorides: 3.0 tpy
 10. Sulfuric acid mist: 7.0 tpy
 11. Hydrogen sulfide (H₂S): 10 tpy
 12. Total reduced sulfur (including H₂S): 10 tpy
 13. Reduced sulfur compounds (including H₂S): 10 tpy
 14. Municipal waste combustor (MWC) acid gases (measured as total sulfur dioxide and hydrogen chloride): 40 tpy

15. MWC metals (measured as particulate matter): 15 tpy
16. MWC organics (measured as total tetra- through octachlorinated dibenzo-p-dioxins and dibenzofurans): 3.5×10^{-6} tpy
17. CFCs 11, 12, 112, 114, 115: any emission rate
18. Halons 1211, 1301, 2402; any emission rate

(c) "Significant" means any emissions rate in reference to a net emissions increase or the potential of a source to emit an air contaminant subject to regulation under the Act other than air contaminants listed in par. (a) or under section 112 (b) of the Act (42 USC 7412 (b)).

(d) Notwithstanding par. (a), "significant" means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than $1 \mu\text{g}/\text{m}^3$ (24-hour average).

(28) "Stationary source" means any building, structure, facility or installation which emits or may emit any air contaminant subject to regulation under the act.

(29) "Temporary clean coal technology demonstration project" means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the state implementation plans for the state in which the project is located and other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

History: Cr. Register, January, 1987, No. 373, eff. 2-1-87; am. (27) (a) Register, December, 1988, No. 396, eff. 1-1-89; am. (intro.), (22) (c), (24) (d), (27) (b) and (28), cr. (22) (d), Register, May, 1992, No. 437, eff. 6-1-92; emerg. am. (7) and (27) (a) and (b), eff. 11-15-92; am. (intro.), (1) (c), (7), (8) and (27) (a), cr. (1) (d), (8m), (8s), (11m), (21) (b) 8, to 11., (24m), (25g), (25m), (25s) and (29), renum. (14) to be NR 400.02 (39m) and am., r. (27) (b), Register, May, 1993, No. 449, eff. 6-1-93; corrections in (1) (intro.) and (25g) (a) made under s. 13.93 (2m) (b) 7, and 6., Stats., Register, May, 1993, No. 449; am. (1) (b), (2) (a), (3) (intro.), (7), (21) (b) 6., (24) (d), (25m) (b), (c), Register, April, 1995, No. 472, eff. 5-1-95; am. (1) (d), (2) (intro.), (3) (intro.), (a), (4) (a) (intro.), 1. and 2., (b) 1. and 2., (7), (8), (12), (21) (intro.), (b) 3., 5. a. and b., 6., 8. a., (22) (a) 1. and 2., (24) (d), (25g) (d), (25m) (a) and (c), (25s) (intro.) and (a), (27) (c) and (28), r. (5), cr. (21m) and (22m), Register, December, 1995, No. 480, eff. 1-1-96; am. (3) (intro.), (7), (9) (intro.), (21) (b) 2., 3., 8 and 9. (intro.) (22m) (b) 1., (24) (b) (intro.), 1., (24m) (intro.), (25g) and (25m) (a), r. (3) (a), (b), Register, December, 1996, No., 492, eff. 1-1-97; am. (21) (b) (intro.), 5. and (22) (c), Register, October, 1999, No. 526, eff. 11-1-99; **CR 01-081: am. (22) (c) Register September 2004 No. 585, eff. 10-1-04.**

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establishing the magnitude of the basic design parameter(s) specified in paragraphs (h)(2)(i) and (ii) of this section.

(v) If design information is not available for a process unit, then the owner or operator shall determine the process unit's basic design parameter(s) using the maximum value achieved by the process unit in the five-year period immediately preceding the planned activity.

(vi) Efficiency of a process unit is not a basic design parameter.

(3) The replacement activity shall not cause the process unit to exceed any emission limitation, or operational limitation that has the effect of constraining emissions, that applies to the process unit and that is legally enforceable.

[51 FR 40669, Nov. 7, 1986]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting § 51.165, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at www.fdsys.gov.

EFFECTIVE DATE NOTE: At 76 FR 17552, Mar. 30, 2011, § 51.165, paragraphs (a)(1)(v)(G) and (v)(1)(vi)(C) (3) are stayed indefinitely.

§ 51.166 Prevention of significant deterioration of air quality.

(a)(1) *Plan requirements.* In accordance with the policy of section 101(b)(1) of the Act and the purposes of section 160 of the Act, each applicable State Implementation Plan and each applicable Tribal Implementation Plan shall contain emission limitations and such other measures as may be necessary to prevent significant deterioration of air quality.

(2) *Plan revisions.* If a State Implementation Plan revision would result in increased air quality deterioration over any baseline concentration, the plan revision shall include a demonstration that it will not cause or contribute to a violation of the applicable increment(s). If a plan revision proposing less restrictive requirements was submitted after August 7, 1977 but on or before any applicable baseline date and was pending action by the Administrator on that date, no such demonstration is necessary with respect to the area for which a baseline date would be established before final action is taken on the plan revision. Instead,

the assessment described in paragraph (a)(4) of this section, shall review the expected impact to the applicable increment(s).

(3) *Required plan revision.* If the State or the Administrator determines that a plan is substantially inadequate to prevent significant deterioration or that an applicable increment is being violated, the plan shall be revised to correct the inadequacy or the violation. The plan shall be revised within 60 days of such a finding by a State or within 60 days following notification by the Administrator, or by such later date as prescribed by the Administrator after consultation with the State.

(4) *Plan assessment.* The State shall review the adequacy of a plan on a periodic basis and within 60 days of such time as information becomes available that an applicable increment is being violated.

(5) *Public participation.* Any State action taken under this paragraph shall be subject to the opportunity for public hearing in accordance with procedures equivalent to those established in § 51.102.

(6) *Amendments.* (i) Any State required to revise its implementation plan by reason of an amendment to this section, with the exception of amendments to add new maximum allowable increases or other measures pursuant to section 166(a) of the Act, shall adopt and submit such plan revision to the Administrator for approval no later than 3 years after such amendment is published in the FEDERAL REGISTER. With regard to a revision to an implementation plan by reason of an amendment to paragraph (c) of this section to add maximum allowable increases or other measures, the State shall submit such plan revision to the Administrator for approval within 21 months after such amendment is published in the FEDERAL REGISTER.

(ii) Any revision to an implementation plan that would amend the provisions for the prevention of significant air quality deterioration in the plan shall specify when and as to what sources and modifications the revision is to take effect.

(iii) Any revision to an implementation plan that an amendment to this section required shall take effect no

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later than the date of its approval and may operate prospectively.

(7) *Applicability.* Each plan shall contain procedures that incorporate the requirements in paragraphs (a)(7)(i) through (vi) of this section.

(i) The requirements of this section apply to the construction of any new major stationary source (as defined in paragraph (b)(1) of this section) or any project at an existing major stationary source in an area designated as attainment or unclassifiable under sections 107(d)(1)(A)(ii) or (iii) of the Act.

(ii) The requirements of paragraphs (j) through (r) of this section apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this section otherwise provides.

(iii) No new major stationary source or major modification to which the requirements of paragraphs (j) through (r)(5) of this section apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements.

(iv) Each plan shall use the specific provisions of paragraphs (a)(7)(iv)(a) through (f) of this section. Deviations from these provisions will be approved only if the State specifically demonstrates that the submitted provisions are more stringent than or at least as stringent in all respects as the corresponding provisions in paragraphs (a)(7)(iv)(a) through (f) of this section.

(a) Except as otherwise provided in paragraphs (a)(7)(v) and (vi) of this section, and consistent with the definition of major modification contained in paragraph (b)(2) of this section, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases—a significant emissions increase (as defined in paragraph (b)(39) of this section), and a significant net emissions increase (as defined in paragraphs (b)(3) and (b)(23) of this section). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

(b) The procedure for calculating (before beginning actual construction) whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type of emissions units being modified, according to paragraphs (a)(7)(iv)(c) through (f) of this section. The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (i.e., the second step of the process) is contained in the definition in paragraph (b)(3) of this section. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

(c) *Actual-to-projected-actual applicability test for projects that only involve existing emissions units.* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in paragraph (b)(40) of this section) and the baseline actual emissions (as defined in paragraphs (b)(47)(i) and (ii) of this section) for each existing emissions unit, equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).

(d) *Actual-to-potential test for projects that only involve construction of a new emissions unit(s).* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in paragraph (b)(4) of this section) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in paragraph (b)(47)(iii) of this section) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).

(e) [Reserved]

(f) *Hybrid test for projects that involve multiple types of emissions units.* A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in paragraphs

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(a)(7)(iv)(c) through (d) of this section as applicable with respect to each emissions unit equals or exceeds the significant amount for that pollutant (as defined in paragraph (b)(23) of this section).

(v) The plan shall require that for any major stationary source for a PAL for a regulated NSR pollutant, the major stationary source shall comply with requirements under paragraph (w) of this section.

(b) *Definitions.* All State plans shall use the following definitions for the purposes of this section. Deviations from the following wording will be approved only if the State specifically demonstrates that the submitted definition is more stringent, or at least as stringent, in all respects as the corresponding definitions below:

(1)(i) *Major stationary source* means:

(a) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tons per year or more of any regulated NSR pollutant: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants (with thermal dryers), primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140), fossil-fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;

(b) Notwithstanding the stationary source size specified in paragraph (b)(1)(i)(a) of this section, any stationary source which emits, or has the potential to emit, 250 tons per year or more of a regulated NSR pollutant; or

(c) Any physical change that would occur at a stationary source not otherwise qualifying under paragraph (b)(1) of this section, as a major stationary source if the change would constitute a major stationary source by itself.

(ii) A major source that is major for volatile organic compounds or NO_x shall be considered major for ozone.

(iii) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this section whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

(a) Coal cleaning plants (with thermal dryers);

(b) Kraft pulp mills;

(c) Portland cement plants;

(d) Primary zinc smelters;

(e) Iron and steel mills;

(f) Primary aluminum ore reduction plants;

(g) Primary copper smelters;

(h) Municipal incinerators capable of charging more than 250 tons of refuse per day;

(i) Hydrofluoric, sulfuric, or nitric acid plants;

(j) Petroleum refineries;

(k) Lime plants;

(l) Phosphate rock processing plants;

(m) Coke oven batteries;

(n) Sulfur recovery plants;

(o) Carbon black plants (furnace process);

(p) Primary lead smelters;

(q) Fuel conversion plants;

(r) Sintering plants;

(s) Secondary metal production plants;

(t) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;

(u) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;

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(v) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;

(w) Taconite ore processing plants;

(x) Glass fiber processing plants;

(y) Charcoal production plants;

(z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;

(aa) Any other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the Act.

(2)(i) *Major modification* means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in paragraph (b)(39) of this section) of a regulated NSR pollutant (as defined in paragraph (b)(49) of this section); and a significant net emissions increase of that pollutant from the major stationary source.

(ii) Any significant emissions increase (as defined at paragraph (b)(39) of this section) from any emissions units or net emissions increase (as defined in paragraph (b)(3) of this section) at a major stationary source that is significant for volatile organic compounds or NO_x shall be considered significant for ozone.

(iii) A physical change or change in the method of operation shall not include:

(a) Routine maintenance, repair and replacement. Routine maintenance, repair and replacement shall include, but not be limited to, any activity(s) that meets the requirements of the equipment replacement provisions contained in paragraph (y) of this section;

NOTE TO PARAGRAPH (b)(2)(iii)(a): On December 24, 2003, the second sentence of this paragraph (b)(2)(iii)(a) is stayed indefinitely by court order. The stayed provisions will become effective immediately if the court terminates the stay. At that time, EPA will publish a document in the FEDERAL REGISTER advising the public of the termination of the stay.

(b) Use of an alternative fuel or raw material by reason of any order under section 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) or by reason of a natural gas cur-

tailment plan pursuant to the Federal Power Act;

(c) Use of an alternative fuel by reason of an order or rule under section 125 of the Act;

(d) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;

(e) Use of an alternative fuel or raw material by a stationary source which:

(1) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or § 51.166; or

(2) The source is approved to use under any permit issued under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166;

(f) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR subpart I or § 51.166.

(g) Any change in ownership at a stationary source.

(h) [Reserved]

(i) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:

(1) The State implementation plan for the State in which the project is located; and

(2) Other requirements necessary to attain and maintain the national ambient air quality standards during the project and after it is terminated.

(j) The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.

(k) The reactivation of a very clean coal-fired electric utility steam generating unit.

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(iv) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under paragraph (w) of this section for a PAL for that pollutant. Instead, the definition at paragraph (w)(2)(viii) of this section shall apply.

(v) Fugitive emissions shall not be included in determining for any of the purposes of this section whether a physical change in or change in the method of operation of a major stationary source is a major modification, unless the source belongs to one of the source categories listed in paragraph (b)(1)(iii) of this section.

(3)(i) *Net emissions increase* means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:

(a) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to paragraph (a)(7)(iv) of this section; and

(b) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this paragraph (b)(3)(i)(b) shall be determined as provided in paragraph (b)(47), except that paragraphs (b)(47)(i)(c) and (b)(47)(i)(d) of this section shall not apply.

(ii) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs within a reasonable period (to be specified by the State) before the date that the increase from the particular change occurs.

(iii) An increase or decrease in actual emissions is creditable only if:

(a) It occurs within a reasonable period (to be specified by the reviewing authority); and

(b) The reviewing authority has not relied on it in issuing a permit for the source under regulations approved pursuant to this section, which permit is in effect when the increase in actual

emissions from the particular change occurs; and

(c) The increase or decrease in emissions did not occur at a Clean Unit, except as provided in paragraphs (t)(8) and (u)(10) of this section.

(d) As it pertains to an increase or decrease in fugitive emissions (to the extent quantifiable), it occurs at an emissions unit that is part of one of the source categories listed in paragraph (b)(1)(iii) of this section or it occurs at an emission unit that is located at a major stationary source that belongs to one of the listed source categories. Fugitive emission increases or decreases are not included for those emissions units located at a facility whose primary activity is not represented by one of the source categories listed in paragraph (b)(1)(iii) of this section and that are not, by themselves, part of a listed source category.

(iv) An increase or decrease in actual emissions of sulfur dioxide, particulate matter, or nitrogen oxides that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.

(v) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

(vi) A decrease in actual emissions is creditable only to the extent that:

(a) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;

(b) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins;

(c) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change; and

(vii) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any replacement unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.

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(viii) Paragraph (b)(21)(ii) of this section shall not apply for determining creditable increases and decreases.

(4) *Potential to emit* means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. Secondary emissions do not count in determining the potential to emit of a stationary source.

(5) *Stationary source* means any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant.

(6) *Building, structure, facility, or installation* means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same *Major Group* (i.e., which have the same two-digit code) as described in the *Standard Industrial Classification Manual, 1972*, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).

(7) *Emissions unit* means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in paragraph (b)(30) of this section. For purposes of this section, there are two types of emissions units as described in paragraphs (b)(7)(i) and (ii) of this section.

(i) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.

(ii) An existing emissions unit is any emissions unit that does not meet the requirements in paragraph (b)(7)(i) of

this section. A replacement unit, as defined in paragraph (b)(32) of this section, is an existing emissions unit.

(8) *Construction* means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.

(9) *Commence* as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

(i) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or

(ii) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

(10) *Necessary preconstruction approvals or permits* means those permits or approvals required under Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable State Implementation Plan.

(11) *Begin actual construction* means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying of underground pipework, and construction of permanent storage structures. With respect to a change in method of operation this term refers to those on-site activities, other than preparatory activities, which mark the initiation of the change.

(12) *Best available control technology* means an emissions limitation (including a visible emissions standard) based on the maximum degree of reduction for each a regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the reviewing authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such

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source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combination techniques for control of such pollutant. In no event shall application of best available control technology result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR parts 60 and 61. If the reviewing authority determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard or combination thereof, may be prescribed instead to satisfy the requirement for the application of best available control technology. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

(13)(i) *Baseline concentration* means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:

(a) The actual emissions, as defined in paragraph (b)(21) of this section, representative of sources in existence on the applicable minor source baseline date, except as provided in paragraph (b)(13)(ii) of this section;

(b) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.

(ii) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):

(a) Actual emissions, as defined in paragraph (b)(21) of this section, from any major stationary source on which construction commenced after the major source baseline date; and

(b) Actual emissions increases and decreases, as defined in paragraph (b)(21) of this section, at any stationary source occurring after the minor source baseline date.

(14)(i) *Major source baseline date* means:

(a) In the case of PM₁₀ and sulfur dioxide, January 6, 1975;

(b) In the case of nitrogen dioxide, February 8, 1988; and

(c) In the case of PM_{2.5}, October 20, 2010.

(ii) *Minor source baseline date* means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21 or to regulations approved pursuant to 40 CFR 51.166 submits a complete application under the relevant regulations. The trigger date is:

(a) In the case of PM₁₀ and sulfur dioxide, August 7, 1977;

(b) In the case of nitrogen dioxide, February 8, 1988; and

(c) In the case of PM_{2.5}, October 20, 2011.

(iii) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:

(a) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act for the pollutant on the date of its complete application under 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166; and

(b) In the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.

(iv) Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that the reviewing authority may rescind any such minor source baseline date where it can be shown, to the satisfaction of the reviewing authority, that the emissions increase from the major stationary source, or the net emissions increase

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from the major modification, responsible for triggering that date did not result in a significant amount of PM-10 emissions.

(15)(i) *Baseline area* means any intra-state area (and every part thereof) designated as attainment or unclassifiable under section 107(d)(1)(A)(ii) or (iii) of the Act in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the baseline date is established, as follows: Equal to or greater than 1 $\mu\text{g}/\text{m}^3$ (annual average) for SO_2 , NO_2 , or PM_{10} ; or equal or greater than 0.3 $\mu\text{g}/\text{m}^3$ (annual average) for $\text{PM}_{2.5}$.

(ii) Area redesignations under section 107(d)(1)(A)(ii) or (iii) of the Act cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:

(a) Establishes a minor source baseline date; or

(b) Is subject to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51.166, and would be constructed in the same State as the State proposing the redesignation.

(iii) Any baseline area established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM-10 increments, except that such baseline area shall not remain in effect if the permit authority rescinds the corresponding minor source baseline date in accordance with paragraph (b)(14)(iv) of this section.

(16) *Allowable emissions* means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

(i) The applicable standards as set forth in 40 CFR parts 60 and 61;

(ii) The applicable State Implementation Plan emissions limitation, including those with a future compliance date; or

(iii) The emissions rate specified as a federally enforceable permit condition.

(17) *Federally enforceable* means all limitations and conditions which are

enforceable by the Administrator, including those requirements developed pursuant to 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, any permit requirements established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR part 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the State implementation plan and expressly requires adherence to any permit issued under such program.

(18) *Secondary emissions* means emissions which occur as a result of the construction or operation of a major stationary source or major modification itself. For the purposes of this section, secondary emissions must be specific, well defined, quantifiable, and impact the same general areas the stationary source modification which causes the secondary emissions. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel.

(19) *Innovative control technology* means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.

(20) *Fugitive emissions* means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

(21)(i) *Actual emissions* means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with paragraphs (b)(21)(ii) through (iv) of this section, except that this definition shall not apply for calculating whether

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requirements in sections 166(c) and 166(d) of the Clean Air Act for a regulated NSR pollutant for which the Administrator has established maximum allowable increases pursuant to section 166(a) of the Act, the requirements for maximum allowable increases for that pollutant under paragraph (c)(1) of this section shall not apply upon approval of the plan by the Administrator. The following regulated NSR pollutants are eligible for such treatment:

(1) Nitrogen dioxide.

(1i) PM_{2.5}.

(d) *Ambient air ceilings.* The plan shall provide that no concentration of a pollutant shall exceed:

(1) The concentration permitted under the national secondary ambient air quality standard, or

(2) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

(e) *Restrictions on area classifications.* The plan shall provide that—

(1) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:

(i) International parks,

(ii) National wilderness areas which exceed 5,000 acres in size,

(iii) National memorial parks which exceed 5,000 acres in size, and

(iv) National parks which exceed 6,000 acres in size.

(2) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this section.

(3) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this section.

(4) The following areas may be redesignated only as Class I or II:

(i) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and

(ii) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

(f) *Exclusions from increment consumption.* (1) The plan may provide that the following concentrations shall be excluded in determining compliance with a maximum allowable increase:

(i) Concentrations attributable to the increase in emissions from stationary sources which have converted from the use of petroleum products, natural gas, or both by reason of an order in effect under section 2 (a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (or any superseding legislation) over the emissions from such sources before the effective date of such an order;

(ii) Concentrations attributable to the increase in emissions from sources which have converted from using natural gas by reason of natural gas curtailment plan in effect pursuant to the Federal Power Act over the emissions from such sources before the effective date of such plan;

(iii) Concentrations of particulate matter attributable to the increase in emissions from construction or other temporary emission-related activities of new or modified sources;

(iv) The increase in concentrations attributable to new sources outside the United States over the concentrations attributable to existing sources which are included in the baseline concentration; and

(v) Concentrations attributable to the temporary increase in emissions of sulfur dioxide, particulate matter, or nitrogen oxides from stationary sources which are affected by plan revisions approved by the Administrator as meeting the criteria specified in paragraph (f)(4) of this section.

(2) If the plan provides that the concentrations to which paragraph (f)(1) (i) or (ii) of this section, refers shall be excluded, it shall also provide that no exclusion of such concentrations shall apply more than five years after the effective date of the order to which paragraph (f)(1)(i) of this section, refers or the plan to which paragraph (f)(1)(ii) of this section, refers, whichever is applicable. If both such order and plan are applicable, no such exclusion shall

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Document: 22

Filed: 05/03/2013 Pages: 102

apply more than five years after the later of such effective dates.

(3) [Reserved]

(4) For purposes of excluding concentrations pursuant to paragraph (f)(1)(v) of this section, the Administrator may approve a plan revision that:

(i) Specifies the time over which the temporary emissions increase of sulfur dioxide, particulate matter, or nitrogen oxides would occur. Such time is not to exceed 2 years in duration unless a longer time is approved by the Administrator.

(ii) Specifies that the time period for excluding certain contributions in accordance with paragraph (f)(4)(i) of this section, is not renewable;

(iii) Allows no emissions increase from a stationary source which would:

(a) Impact a Class I area or an area where an applicable increment is known to be violated; or

(b) Cause or contribute to the violation of a national ambient air quality standard;

(iv) Requires limitations to be in effect the end of the time period specified in accordance with paragraph (f)(4)(i) of this section, which would ensure that the emissions levels from stationary sources affected by the plan revision would not exceed those levels occurring from such sources before the plan revision was approved.

(g) *Redesignation.* (1) The plan shall provide that all areas of the State (except as otherwise provided under paragraph (e) of this section) shall be designated either Class I, Class II, or Class III. Any designation other than Class II shall be subject to the redesignation procedures of this paragraph. Redesignation (except as otherwise precluded by paragraph (e) of this section) may be proposed by the respective States or Indian Governing Bodies, as provided below, subject to approval by the Administrator as a revision to the applicable State implementation plan.

(2) The plan may provide that the State may submit to the Administrator a proposal to redesignate areas of the State Class I or Class II: *Provided, That:*

(i) At least one public hearing has been held in accordance with procedures established in §51.102.

(ii) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;

(iii) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social, and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

(iv) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the State has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity (not in excess of 60 days) to confer with the State respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the State shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and

(v) The State has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

(3) The plan may provide that any area other than an area to which paragraph (e) of this section refers may be redesignated as Class III if—

(i) The redesignation would meet the requirements of provisions established in accordance with paragraph (g)(2) of this section;

(ii) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor of the State, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless State law

Carter, Sally

From: Carter, Sally
Sent: Monday, January 22, 2018 3:54 PM
To: Ogulei, David
Subject: Per your request.....
Attachments: Scanned from a Xerox Multifunction Printer.pdf

IN THE UNITED STATES COURT FOR THE DISTRICT OF UTAH
CENTRAL DIVISION

UNITED STATES OF AMERICA,

Plaintiff,

UTE INDIAN TRIBE OF THE UINTAH
AND OURAY RESERVATION,

Plaintiff-Intervenor,

FRANCES M. POOWEGUP, IRENE C.
CUCH AND PHILLIP CHIMBURAS.

Plaintiff-Intervenor,

vs.

QUESTAR GAS MANAGEMENT
COMPANY,

Defendant.

MEMORANDUM DECISION AND
ORDER GRANTING PLAINTIFF'S
MOTION FOR SUMMARY
JUDGMENT ON DEFENDANT'S
FOURTH AFFIRMATIVE DEFENSE

Case No. 2:08-CV-167 TS

This matter is before the Court on Plaintiff's Renewed Motion for Summary Judgment on Defendant's Fourth Affirmative Defense. For the reasons discussed below, the Court will grant the Motion.

I. BACKGROUND

The government brought this action against QEPFS alleging violations of the Clean Air Act ("CAA") at five natural gas compressor stations QEPFS owns and operates in the Uintah basin. The compressor station facilities are known as Coyote Wash, Chapita, Island, Wonsits Valley, and River Bend (collectively, the "Facilities"). Plaintiff's Complaint alleges violations of the CAA's Prevention of Significant Deterioration ("PSD"), National Emission Standard for Hazardous Air Pollutants ("NESHAP"), and Title V programs. The NESHAP and PSD programs apply to "major sources" of pollution and provide that a facility's major source status must be determined based on its "potential to emit."

Defendant's Fourth Affirmative Defense states:

The claims asserted and relief sought by Plaintiff are barred, in whole or in part, because the requirement for emissions controls to be "federally enforceable" is, by court remand in *National Mining Assoc. v. EPA*, 59 F.3d 1351, 1365 (D.C. Cir. 1995), and vacatur in *Chemical Mfrs. Ass'n v. EPA*, 1995 U.S. App. LEXIS 31475, Case No. 89-1514 (D.C. Cir. Sept. 15, 1995), and by EPA's own admission, no longer effective, and consequently, when taking into account QGM's emission controls, the compression facilities at issue were not "major sources" under the PSD or NESHAP programs, as alleged in the Complaint.¹

Plaintiff previously moved for summary judgment on Defendant's Fourth Affirmative Defense,² which the Court denied as being premature.³ Plaintiff now renews its Motion. Plaintiff frames the issue as a dispute as to "the legal standard to be applied to calculate a

¹Docket No. 263, ¶ 225

²Docket No. 54

³Docket No. 163

facility's potential to emit."⁴ Plaintiff argues that limitations on a facility's emissions may only be considered when they are enforceable by a governmental entity, while Defendant argues that emissions controls should be considered regardless of whether use of the controls is enforceable. Plaintiff's Motion seeks "guidance on how to present [the parties'] factual contentions on the Five Facilities' potential to emit."⁵

II. SUMMARY JUDGMENT STANDARD

Summary judgment is proper if the moving party can demonstrate that there is no genuine issue of material fact and it is entitled to judgment as a matter of law.⁶ In considering whether a genuine issue of material fact exists, the Court determines whether a reasonable jury could return a verdict for the nonmoving party in the face of all the evidence presented.⁷ The Court is required to construe all facts and reasonable inferences in the light most favorable to the nonmoving party.⁸

⁴Docket No. 287 at 1.

⁵*Id.* at 2.

⁶FED.R.CIV.P. 56(a).

⁷*See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 249 (1986); *Clifton v. Craig*, 924 F.2d 182, 183 (10th Cir. 1991).

⁸*See Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986); *Wright v. Sw. Bell Tel. Co.*, 925 F.2d 1288, 1292 (10th Cir. 1991).

III. DISCUSSION

As stated, the NESHAP and PSD programs apply to “major sources” of pollution and provide that a facility’s major source status must be determined based on its “potential to emit.”⁹ The EPA has promulgated regulations defining “potential to emit” to include consideration of only those pollution controls that are “federally enforceable.”¹⁰

The EPA’s definitions of “potential to emit” in both programs were challenged in the D.C. Circuit.¹¹ The petitioners in *National Mining* contended that the definition of “potential to emit” in the NESHAP regulations was contrary to the language of the CAA because it disregarded emissions limitations imposed by state or local regulations that are effective but not “federally enforceable.”¹² The D.C. Circuit noted that “it was common ground” that Congress intended the word “controls” to refer to “governmental regulations and not, for instance, operational restrictions that an owner might voluntarily adopt.”¹³ The court also noted that Congress intended the words “considering controls” to “stand for *effective* controls,” stating that the “EPA clearly is not obligated to take into account controls that are only chimeras

⁹42 U.S.C. §§ 7412(a)(1), 7475(a), 7479(1).

¹⁰40 C.F.R. §§ 63.2, 52.21(b)(4).

¹¹See *Nat’l Mining Ass’n v. EPA*, 59 F.3d 1351, 1365 (D.C. Cir. 1995); *Chem. Mfrs. Ass’n v. EPA*, 70 F.3d 637 (D.C. Cir. 1995).

¹²*Nat’l Mining*, 59 F.3d at 1362.

¹³*Id.* at 1362.

and do not really restrain an operator from emitting pollution.”¹⁴ The court concluded that the EPA had failed to demonstrate that Congress intended for state emissions controls to be disregarded in considering “major source” status and remanded the definition for further explanation.¹⁵ The court did not, however, vacate the regulation.¹⁶

Before the *National Mining* decision, EPA had recognized certain state-enforceable limits on a source’s potential to emit during a transition period to give states the opportunity to design and implement federally enforceable mechanisms to limit potential to emit.¹⁷ That policy remains in effect until new rulemaking has been completed.¹⁸

The petitioners in *Chemical Manufacturers* challenged the “potential to emit” definition in the PSD regulations on the same grounds.¹⁹ The D.C. Circuit remanded the definition in the PSD regulations for reconsideration in light of the *National Mining* decision and, unlike *National Mining*, vacated the underlying definition in the PSD regulations.²⁰

¹⁴*Id.*

¹⁵*Id.* at 1365.

¹⁶*Nat’l Mining Ass’n v. EPA*, 1996 WL 10101, at *1 (D.C. Cir. Jan. 2, 1996).

¹⁷Docket No. 287, Ex. 5.

¹⁸*Id.*, Ex. 6.

¹⁹*Chem. Mfrs.*, 70 F.3d at 637.

²⁰*Id.*

After the *Chemical Manufacturers* decision, the EPA issued an Interim Policy on Federal Enforceability Requirement for Limitations on Potential to Emit.²¹ That Interim Policy provided that “the term ‘federally enforceable’ should now be read to mean ‘federally enforceable or legally and practicably enforceable by a state or local air pollution control agency.’”²² That policy remains in effect.²³

The EPA has not promulgated a new definition of “potential to emit.”

With this background in mind, the Court turns to the analysis of the issues presented in Plaintiff’s Motion. The key question is how the Court should define “potential to emit” under the two sets of regulations. This determination requires the Court to interpret and attempt to give meaning to *National Mining* and *Chemical Manufacturers*.

The Court will first consider the issue under the NESHAP regulations. As stated above, the regulation defining “potential to emit” in the NESHAP regulations was remanded to the EPA, but was not vacated. Therefore, despite Defendant’s arguments to the contrary, that regulation remains in existence.

The parties present differing positions concerning how “potential to emit” should be defined. While Plaintiff argues that only the “federal” requirement of the federal enforceability requirement was at issue in *National Mining*, Defendant argues that the entire enforceability requirement should be disregarded.

²¹Docket No. 287, Ex. 7.

²²*Id.* at 3.

²³*Id.* at 1.

The Court agrees with Plaintiff's interpretation. A close reading of *National Mining* reveals that the court was concerned with EPA's failure to consider state and local controls and EPA's limiting the enforceability requirement to controls that are federally enforceable. There is nothing in that case to suggest that the court was concerned with enforceability in general. Indeed, the court emphasized that Congress meant for controls to be effective and that "it [was] certainly permissible for EPA to have refused to take into account ineffective controls."²⁴ Defendant's argument that *National Mining* did away with the requirement of enforceability altogether simply reads too much into that decision. Therefore, it will be rejected.

Defendant also argues that *National Mining* distinguished between operation controls and physical controls. As set forth above, the D.C. Circuit stated that "it was common ground" that Congress intended the word "controls" to refer to "governmental regulations and not, *for instance*, operational restrictions that an owner might voluntarily adopt."²⁵ This precise issue was addressed in *Ogden Projects, Inc. v. New Morgan Landfill Company, Inc.*²⁶ In that case, the defendant argued that *National Mining* only governed assessment of operational restrictions.²⁷ The court disagreed with this position. The court held that "*National Mining Association* established a framework for evaluating operational as well as physical restrictions. The opinion

²⁴*Nat'l Mining*, 59 F.3d at 1363.

²⁵*Id.* at 1362 (emphasis added).

²⁶911 F.Supp. 863 (E.D. Pa. 1996).

²⁷*Id.* at 875.

makes clear that the court was dealing with both types of pollution controls.”²⁸ *Ogden Projects* goes on to explain that “[i]f the court intended to limit its decision to only operational restrictions, it would have said so explicitly. It did not.”²⁹

The Court agrees with this assessment. The use of the phrase “for instance” shows that the *National Mining* court was using operational restrictions as but one example of types of controls. The Court believes that physical controls and operational controls are largely similar in nature and are distinguishable from controls enforced by a governmental entity. *National Mining* addressed both types of controls. Therefore, the Court disagrees with Defendant’s assessment that *National Mining* only addressed operational restrictions.

The Court must still determine how to define “potential to emit.” To do so, the EPA points the Court to certain policy statements it has issued. As set out above, the EPA has provided policy statements, both before and after *National Mining*, in which the EPA provided clarification that controls must be legally and practicably enforceable. Defendant argues that the Court should give no deference to these policy statements.

“Interpretations such as those in opinion letters – like interpretations contained in policy statements, agency manuals, and enforcement guidelines, all of which lack the force of law – do not warrant *Chevron*-style deference.”³⁰ “Instead, interpretations contained in formats such as opinion letters are “entitled to respect” under our decision in *Skidmore v. Swift & Co.* . . . , but

²⁸*Id.*

²⁹*Id.* at 875-76.

³⁰*Christensen v. Harris Cnty.*, 529 U.S. 576, 587 (2000).

only to the extent that those interpretations have the ‘power to persuade.’”³¹ In determining whether to apply *Skidmore* deference, the Court affords weight to an agency’s decision “depend[ing] upon the thoroughness evident in its consideration, the validity of its reasoning, its consistency with earlier and later pronouncements, and all those factors which give it power to persuade.”³²

Considering these factors, the Court finds that the EPA policy statements concerning “potential to emit” are entitled to *Skidmore* deference. These policy statements appropriately take into consideration those concerns addressed by the court in *National Mining and Chemical Manufacturers*. The policy statements align EPA’s determination of “potential to emit” with the decisions from the D.C. Circuit. While it certainly would have been better for the EPA to promulgate a new definition, the fact that the EPA has not done so does not mean that these policy statements are not entitled to some deference.

Defendant raises a number of arguments in arguing that no deference should be given, pointing out the various ways that the EPA has allegedly acted inconsistently and unfairly. These arguments are largely irrelevant to the issue before the Court and do nothing to suggest that deference should not be given in this instance.

At least one other court has seemingly given deference to the EPA’s policy statements on this issue. The Second Circuit, in *Weiler v. Chatham Forest Products, Inc.*,³³ specifically relied

³¹*Id.* (citing *Skidmore*, 323 U.S. 134, 140 (1944)).

³²*Skidmore*, 323 U.S. at 140.

³³392 F.3d 532 (2d Cir. 2004).

on the EPA's policy statement when interpreting "potential to emit" in other EPA regulations.

That court stated:

In short, then, a proposed facility that is physically capable of emitting major levels of the relevant pollutants is to be considered a major emitting facility under the Act unless there are legally and practicably enforceable mechanisms in place to make certain that the emissions remain below the relevant levels.³⁴

As in that case, the Court finds that, as it relates to the NESHAP regulations, limitations on a facility's emissions may only be considered when they are legally and practicably enforceable by a governmental entity.

The more difficult question is what definition should be applied to "potential to emit" under the PSD program. As set forth above, *Chemical Manufacturers* vacated the definition of "potential to emit" under the PSD regulations. As a result, that regulation is void.³⁵ Despite the procedural differences in the definitions, however, there is no legitimate reason that the definition under the PSD program should be any different from that under NESHAP. Therefore, the same definition will be applied to the PSD claims.

Based on the above, the Court finds that limitations on a facility's emissions may only be considered when they are enforceable by a governmental entity. As neither party has sought summary judgment on the issue, the Court does not decide whether Defendant's facilities are considered "major sources" under this definition.

³⁴*Id.* at 535.

³⁵*See Ala. Power Co. v. EPA*, 40 F.3d 450, 456 (D.C. Cir. 1994) ("To 'vacate' . . . means to annul; to cancel or rescind; to declare, to make, or to render, void; to defeat; to deprive of force; to make of no authority or validity; to set aside." (quotation marks and citation omitted)).


IV. CONCLUSION

It is therefore

ORDERED that Plaintiff's Renewed Motion for Summary Judgment on Defendant's Fourth Affirmative Defense (Docket No. 285) is **GRANTED**.

DATED May 11, 2011.

BY THE COURT:

A handwritten signature in black ink, appearing to read "Ted Stewart", is written over a horizontal line.

TED STEWART
United States District Judge

Carter, Sally

From: Carter, Sally
Sent: Thursday, January 18, 2018 2:14 PM
To: Ogulei, David; Damico, Genevieve (damico.genevieve@epa.gov);
aburano.douglas@epa.gov
Cc: Bloomberg, David E.
Subject: Proposed PSD Rulemaking for the State of Illinois
Attachments: 105 Revisions Final USEPA Review.pdf; 252 Revisions Final USEPA Review.pdf; 35 IAC
204 Final USEPA Review.pdf; 101 Revisions Final USEPA Review.pdf

Genevieve and David,

Please find attached the Illinois EPA's proposed rulemaking proposal for a State Implementation Plan (SIP)-approved Prevention of Significant Deterioration (PSD) program in Illinois. The Illinois EPA plans to file this rulemaking proposal before the Illinois Pollution Control Board (Board) in the near term. Again, in addition to a new 35 Ill. Adm. Code Part 204, Prevention of Significant Deterioration, this proposal will include amendments to the Board's procedural regulations necessary to accommodate appeals of PSD permits to the Board. These proposed changes have been memorialized in 35 Ill. Adm. Code 101, General Rules, and 35 Ill. Adm. Code 105, Appeals of Final Decision of State Agencies. In addition, while it will not be a part of the regulatory proposal to the Board, the package will also include revisions to the relevant Agency rules as well, 35 Ill. Adm. Code Part 252, Public Participation in the Air Pollution Control Permit Program.

USEPA, Region V Permits previously reviewed this proposal and subsequently conveyed preliminary comments to the Illinois EPA in two conference calls. As appropriate, the attached rulemaking proposal memorializes the outcome of these discussions. As previously discussed, the Illinois EPA is affording USEPA one final opportunity to review the attached rulemaking proposal prior to its filing with the Board. Please provide any feedback or comments by no later than **COB Tuesday, February 20, 2018**. If you have any questions or comments that you would like to discuss in the interim, please do not hesitate to call. My direct line is (217)782-5581.

Doug,

I know that David Bloomberg previously contacted you in September regarding this proposed rulemaking proposal and offered a draft for your review at that time. USEPA Region V Permits asked that I continue to keep you in the loop. Please feel free to contact me at the above number if you have any questions or require additional information.

Thank you.

Sally Carter
Assistant Counsel
Illinois EPA

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE A: GENERAL PROVISIONS
CHAPTER I: POLLUTION CONTROL BOARD

PART 105
APPEALS OF FINAL DECISIONS OF STATE AGENCIES

SUBPART A: GENERAL PROVISIONS

Section	
105.100	Applicability
105.102	Severability
105.104	Definitions
105.106	Computation of Time, Filing and Service Requirements
105.108	Dismissal of Petition
105.110	Hearing Process
105.112	Burden of Proof
105.114	Calculation of Decision Deadline
105.116	<u>Agency or OSFM Record Filing</u>
105.118	Sanctions for Non-Compliant Filing of the <u>Agency Record or the OSFM Record</u>

SUBPART B: APPEAL OF AGENCY PERMIT DECISIONS AND OTHER FINAL
DECISIONS OF THE AGENCY

Section	
105.200	Applicability
105.202	Parties
105.204	Who May File a Petition for Review
105.206	Time to File the Petition or Request for Extension
105.208	Extension of Time to File a Petition for Review
105.210	Petition Content Requirements
105.212	<u>The Agency Record</u>
105.214	Board Hearing

SUBPART C: CAAPP PERMIT APPEALS

Section	
105.300	Applicability
105.302	General Requirements
105.304	Petition Content Requirements

SUBPART D: APPEAL OF AGENCY LEAKING UNDERGROUND
STORAGE TANK (LUST) DECISIONS

Section	
105.400	Parties
105.402	Who May File a Petition for Review
105.404	Time for Filing the Petition

105.406	Extension of Time to File a Petition for Review
105.408	Petition Content Requirements
105.410	<u>The Agency Record</u>
105.412	Board Hearing

SUBPART E: APPEAL OF OSFM LUST DECISIONS

Section	
105.500	Applicability
105.502	General Overview
105.504	General Requirements
105.506	Petition Content Requirements
105.508	OSFM Record and Appearance
105.510	Location of Hearing

SUBPART F: PSD PERMIT APPEALS

<u>105.600</u>	<u>Applicability</u>
<u>105.602</u>	<u>Parties</u>
<u>105.604</u>	<u>Who May File a Petition for Review</u>
<u>105.606</u>	<u>Time to File a Petition for Review</u>
<u>105.608</u>	<u>Petition Content Requirements</u>
<u>105.610</u>	<u>Board Standards for Granting Stays</u>
<u>105.612</u>	<u>The Agency Record</u>
<u>105.614</u>	<u>Board Hearing</u>

105.APPENDIX A Agency LUST Final Decisions that are Reviewable (Repealed)

105.APPENDIX B Comparison of Former and Current Rules (Repealed)

AUTHORITY: Authorized by Sections 26 and 27 of the Environmental Protection Act (Act) [415 ILCS 5/26 and 27] and implementing Sections 5, 39, 39.5, 40, 40.1, 40.2, and 57 of the Act [415 ILCS 5/5, 39, 39.5, 40, 40.1, 40.2 and 57].

SOURCE: Filed with Secretary of State January 1, 1978; amended 4 Ill. Reg. 52, page 41, effective December 11, 1980; codified 6 Ill. Reg. 8357; amended in R93-24 at 18 Ill. Reg. 4244, effective March 8, 1994; amended in R94-11 at 18 Ill. Reg. 16594, effective November 1, 1994; old Part repealed, new Part adopted in R00-20 at 25 Ill. Reg. 406, effective January 1, 2001; amended in R04-24 at 29 Ill. Reg. 8811, effective June 8, 2005; amended in R14-21 at 39 Ill. Reg. 2369, effective January 27, 2015; amended in R16-17 at 40 Ill. Reg. 7980, effective May 20, 2016; amended in R17-18 at 41 Ill. Reg. 9930, effective July 5, 2017.

SUBPART A: GENERAL PROVISIONS

Section 105.100 Applicability

- a) This Part applies to appeals of final decisions of the Agency and the OSFM to the Board as described in this Part.
- b) This Part must be read in conjunction with 35 Ill. Adm. Code 101, which contains procedures generally applicable to all of the Board's adjudicatory proceedings. In the event of a conflict between the requirements of 35 Ill. Adm. Code 101 and those of this Part, the provisions of this Part apply.

Section 105.102 Severability

If any provision of this Part or its application to any person is adjudged invalid, the adjudication does not affect the validity of this Part as a whole or of any portion not adjudged invalid.

Section 105.104 Definitions

- a) Nonattainment New Source Review (NANSR) means Illinois' rules for Major Stationary Sources Construction and Modification (MSSCAM) at 35 Ill. Adm. Code Part 203.
- a) For the purpose of this Part, Other words and terms will have the meanings as defined in 35 Ill. Adm. Code 101.Subpart B unless otherwise provided, or unless the context clearly indicates otherwise.

Section 105.106 Computation of Time, Filing and Service Requirements

Unless this Part provides otherwise, service, filing, and computation of time must be in accordance with 35 Ill. Adm. Code 101.Subpart C.

Section 105.108 Dismissal of Petition

A petition is subject to dismissal if the Board determines that:

- a) The petition does not contain the informational requirements set forth in Section 105.210, 105.304, 105.408, ~~or 105.506~~ or 105.608;
- b) The petition is untimely under Section 105.206, 105.302, 105.404, ~~or 105.504~~ or 105.606;
- c) The petitioner fails to timely comply with any order issued by the Board or the hearing officer, including an order requiring additional information;
- d) The petitioner does not have standing under applicable law to petition the Board for review of the State agency's final decision; or
- e) Other grounds exist that bar the petitioner from proceeding.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.110 Hearing Process

Hearings will be conducted under 35 Ill. Adm. Code 101.Subpart F, including any hearing held by videoconference (see 35 Ill. Adm. Code 101.600(b)).

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.112 Burden of Proof

Unless this Part provides otherwise:

- a) *The burden of proof shall be on the petitioner except as provided in subsection (b) of this Section [415 ILCS 5/40(a)(1), 40(b) and (e)(3), ~~and 40.2(a) and 40.3(a)(2)]~~.*
- b) *The burden of proof is on the Agency if the Agency issues an NPDES permit that imposes limits which are based upon a criterion or denies a permit based upon application of a criterion, then the Agency shall have the burden of going forward with the basis for the derivation of those limits or criterion which were derived under the Board's rules. [415 ILCS 5/40(a)(1)]*

Section 105.114 Calculation of Decision Deadline

The Board will render its final decision on the petition within any applicable decision period (which commences when the petition is filed in accordance with 35 Ill. Adm. Code 101.300(b)(4)), except:

- a) When the petitioner waives its right to a decision within the prescribed decision period in accordance with 35 Ill. Adm. Code 101.Subpart C; or
- b) When the petitioner files an amended petition, the decision period recommences when the amended petition is filed in accordance with 35 Ill. Adm. Code 101.300(b)(4).

Section 105.116 Agency or OSFM Record Filing

- a) The State agency must file with the Board the entire record of ~~its~~ the Agency's or OSFM's decision, as applicable, within 30 days after the filing of the petition for review, unless this Part provides otherwise, or the Board or hearing officer orders a different filing date. If the ~~State agency~~ Agency or OSFM wishes to seek additional time to file ~~its~~ the record, it must file a request for extension before the date on which ~~its~~ the record is due to be filed. Under 35 Ill. Adm. Code 101.302(h)(2), ~~each~~ the State agency must file ~~its~~ the record through COOL or on compact disk or other portable electronic data storage device and, to the extent

technically feasible, in text-searchable Adobe PDF. The record also must meet the requirements of 35 Ill. Adm. Code 101. Subpart J.

- b) The Agency record or OSFM record, as applicable, must be arranged in chronological sequence, or by category of material and chronologically within each category, and must be sequentially numbered with the letter "R" placed before the number of each page. This page number must appear in the top right corner of each page. The Agency record or OSFM record must be certified by the applicable State agency. The certification must be entitled "Certificate of Record on Appeal". The Certificate must contain an index that lists the documents comprising the Agency record or OSFM record and shows the page numbers upon which each document starts and ends. The Certificate of Record must be served on all parties by the State agency.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.118 Sanctions for Untimely Filing of the Record

If the ~~State agency~~ Agency or OSFM unreasonably fails to timely file ~~its~~ the record on or before the date required under this Part, or unreasonably fails to prepare the record in accordance with this Part and 35 Ill. Adm. Code 101 Subpart J, the Board may sanction the relevant State agency in accordance with 35 Ill. Adm. Code 101. Subpart H.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

SUBPART B: APPEAL OF AGENCY PERMIT DECISIONS AND OTHER FINAL DECISIONS OF THE AGENCY

Section 105.200 Applicability

This Subpart applies to any appeal to the Board of the Agency's final permit decisions and other final decisions of the Agency, except:

- a) When the appeal is of a final CAAPP decision of the Agency, which is addressed in Subpart C of this Part; ~~and~~
- b) When the appeal is of a final leaking underground storage tank decision of the Agency, which is addressed in Subpart D of this Part; ~~and~~
- c) When the appeal is of a final PSD permit decision of the Agency, which is addressed in Subpart F of this Part.

Section 105.202 Parties

- a) **Petitioner.** The person who files a petition for review of the Agency's final decision must be named the petitioner.

- b) Respondent. The Agency must be named the respondent. If a petition is filed under Section 105.204(b), (c) or (d) by a person other than the permit applicant, the permit applicant must be named as a respondent in addition to the Agency.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.204 Who May File a Petition for Review

- a) General. *If the Agency refuses to grant or grants with conditions a permit under Section 39 of the Act, the applicant may petition for a hearing before the Board to contest the decision of the Agency.* [415 ILCS 5/40(a)(1)]
- b) National Pollutant Discharge Elimination System (NPDES) Permit. *If the Agency grants or denies a permit under subsection (b) of Section 39 of the Act, a third party, other than the permit applicant or Agency, may petition the Board for a hearing to contest the decision of the Agency.* [415 ILCS 5/40(e)(1)]
- c) Resource Conservation and Recovery Act (RCRA) Permit for a Hazardous Waste Disposal Site. *If the Agency grants a RCRA permit for a hazardous waste disposal site, a third party, other than the permit applicant or Agency, may petition the Board for a hearing to contest the issuance of the permit. This subsection does not apply to the granting of permits issued for the disposal or utilization of sludge from publicly-owned sewage works.* [415 ILCS 5/40(b)]
- d) Hazardous Waste Permit. *Any party to an Agency proceeding conducted pursuant to Section 39.3 of the Act may petition as of right to the Board for review of the Agency's decision.* [415 ILCS 5/40(c)]
- e) EMSAs. If the Agency terminates an EMSA under Section 52.3-4(b) of the Act, the sponsor may petition the Board for review of the Agency's final decision.
- f) Other Agency Final Decisions. If the Agency's final decision is to deny or to conditionally grant or approve, the person who applied for or otherwise requested the Agency decision, or the person to whom the Agency directs its final decision, may petition the Board for review of the Agency's final decision. In addition, any third party authorized by law to appeal a final decision of the Agency to the Board may file a petition for review with the Clerk.

Section 105.206 Time to File the Petition or Request for Extension

- a) Except as provided in subsection (b), if a person who may petition the Board under Section 105.204 wishes to appeal the Agency's final decision, the person must file the petition with the Clerk within 35 days after the date of service of the Agency's final decision.

- b) If a person with standing as described in Section 105.204(d), or any third party who is authorized by law to appeal a final decision of the Agency to the Board, wishes to appeal the Agency's final decision, the person must file a petition for review with the Clerk within 35 days after the date of issuance of the Agency's final decision.
- c) Except as provided in subsection (d), if a person who may petition the Board under Section 105.204 of this Subpart wishes to request an extension of time to file a petition for review under Section 105.208(a), the person must file the request within 35 days after the date of service of the Agency's final decision.
- d) If a person with standing as described in Section 105.204(d), or any third party who is authorized by law to appeal a final decision of the Agency to the Board, wishes to request an extension of time to file a petition for review under Section 105.208(b), the person must file the request within 35 days after the date of issuance of the Agency's final decision.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.208 Extension of Time to File a Petition for Review

- a) **Permit or Other Agency Final Decision.** For appeals under Section 40(a)(1) of the Act, *the 35-day period described in Section 105.206(a) of this Subpart for petitioning for a hearing may be extended by the applicant for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Agency within the initial appeal period.* [415 ILCS 5/40(a)(1)]
 - 1) The applicant and the Agency must jointly file a request for extension within 35 days after the date of service of the Agency's final decision.
 - 2) The joint request may seek an appeal period not exceeding 125 days from the date of service of the Agency's final decision to file a petition for review under this Subpart.
- b) **Hazardous Waste Permit.** For appeals under Section 40(c) of the Act, *the 35-day period described in Section 105.206(b) for petitioning for a hearing may be extended by the applicant for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Agency within the initial appeal period. If another person with standing to appeal a hazardous waste disposal permit wishes to obtain an extension, there must be a written notice provided to the Board by that person, the Agency, and the applicant, within the initial appeal period.* [415 ILCS 5/40(c)]
 - 1) If the applicant is the petitioner, the applicant and the Agency must jointly file a request for extension within 35 days after the date of issuance of the Agency's final decision.

- 2) If a person with standing other than the applicant is the petitioner, the Agency, the applicant and that person must jointly file a request for extension within 35 days after the date of issuance of the Agency's final decision.
- 3) The joint request may seek an appeal period not exceeding 125 days from the date of issuance of the Agency's final decision to file a petition for review under this Subpart.
- c) Any request for extension of time under this Section must be accompanied by written evidence that the Agency joins in the request, e.g., affidavit of the petitioner or signature of the Agency's representative.
- d) Extensions of time to file petitions under Section 105.204(b), (c), or (e) are not available.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.210 Petition Content Requirements

In addition to the requirements of 35 Ill. Adm. Code 101.Subpart C, the petition must include:

- a) The Agency's final decision or issued permit;
- b) A statement specifying the date of issuance or service of the Agency's final decision or issued permit, as applicable under Section 105.206;
- c) A statement specifying the grounds of appeal; and
- d) For petitions under Section 105.204(b), *a demonstration that the petitioner raised the issues contained within the petition during the public notice period or during the Agency public hearing on the NPDES permit application, if an Agency public hearing was held, and a demonstration that the petitioner is so situated as to be affected by the permitted facility.* [415 ILCS 5/40(e)(2)]

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.212 Agency Record

- a) The Agency must file its entire Agency record of ~~its~~ decision with the Clerk in accordance with Section 105.116.
- b) The Agency record must include:

- 1) Any permit application or other request that resulted in the Agency's final decision;
- 2) Correspondence with the petitioner and any documents or materials submitted by the petitioner to the Agency related to the permit application;
- 3) The permit denial letter that conforms to the requirements of Section 39(a) of the Act or the issued permit or other Agency final decision;
- 4) The Agency public hearing record file of any Agency public hearing that may have been held before the Agency, including any transcripts and exhibits; and
- 5) Any other information the Agency relied upon in making its final decision.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.214 Board Hearing

- a) Except as provided in subsections (b), (c) and (d), the Board will conduct a public hearing, in accordance with 35 Ill. Adm. Code 101. Subpart F, upon an appropriately filed petition for review. The hearing will be based exclusively on the Agency record before the Agency at the time the permit or decision was issued, unless the parties agree to supplement the Agency record under Section 40(d) of the Act. If any party desires to introduce evidence before the Board with respect to any disputed issue of fact, the Board will conduct a separate hearing and receive evidence with respect to the issue of fact.
- b) The Board will not hold a hearing on a petition for review under this Subpart if the Board disposes of the petition on a motion for summary judgment brought under 35 Ill. Adm. Code 101.516.
- c) The Board will not hold a hearing on a petition for review under Section 105.204(c) if the Board determines that:
 - 1) The petition is duplicative or frivolous; or
 - 2) The petitioner is so located as to not be affected by the permitted facility.
- d) The Board will not hold a hearing on a petition for review under Section 105.204(b) or (d) if the Board determines that the petition is duplicative or frivolous.
- e) If the Board determines to hold a hearing, the Clerk will give notice of the hearing under 35 Ill. Adm. Code 101.602.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

SUBPART C: CAAPP PERMIT APPEALS

Section 105.300 Applicability

This Subpart applies to proceedings before the Board concerning appeals from CAAPP final determinations made under Section 39.5 of the Act.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.302 General Requirements

- a) The definitions of 35 Ill. Adm. Code 101.202 and Section 39.5 of the Act will apply to this Subpart unless otherwise provided, or unless the context clearly indicates otherwise.
- b) If the Agency denies a CAAPP permit, permit modification, or permit renewal it must provide to USEPA, the permit applicant and, upon request, affected states, any person who participated in the public comment process and any other person who could obtain judicial review under Section 41(a) of the Act [415 ILCS 5/41(a)] a copy of each notification of denial pertaining to the permit applicant.
- c) The applicant, any person who participated in the public comment process under Section 39.5(8) of the Act, or any other person who could obtain judicial review under Section 41(a) of the Act may contest the decisions of the Agency enumerated in this subsection (c) by filing with the Clerk a petition for review of the Agency's action in accordance with this Section:
 - 1) Denial of a CAAPP permit, including a permit revision or permit renewal, or a determination of incompleteness regarding a submitted CAAPP application;
 - 2) Issuance of a CAAPP permit with one or more conditions or limitations;
 - 3) Failure of the Agency to act on an application for a CAAPP permit, permit renewal, administrative permit amendment or significant permit modification within the time frames specified in Section 39.5(5)(j) or Section 39.5(13) of the Act, as applicable; or
 - 4) Failure of the Agency to take final action within 90 days after receipt of an application requesting minor permit modification procedures (or 180 days for modifications subject to group processing requirements) under Section 39.5(14) of the Act.

- d) For purposes of this Subpart, a person who participated in the Agency public comment process is someone who, during the Agency public comment period, either commented on the draft permit, submitted written comments, or requested notice of the final action on a specific permit application.
- e) The petition filed under subsection (c) must be filed within 35 days after the Agency's final permit action unless:
 - 1) The petition is based solely on grounds arising after the 35 day period expires, in which case the petition may be filed within 35 days after the new grounds for review arise.
 - 2) The applicant is challenging the Agency's failure to timely take final action under Section 39.5 of the Act, in which case the petition must be filed before the Agency takes the final action.
 - 3) However, under no circumstances may a petition challenging the final permit action on a Phase II acid rain permit be filed more than 90 days subsequent to the final permit action.
- f) The Agency must appear as respondent at the hearing and must file within 30 days after service of the petition, an answer consisting of the entire Agency record of the application including the CAAPP permit application, the Agency public hearing record, the CAAPP permit denial or issuance letter, and correspondence with the applicant concerning the CAAPP permit application.
- g) The Clerk will give notice of the petition and hearing in accordance with 35 Ill. Adm. Code 101.
- h) The proceeding will be conducted in accordance with 35 Ill. Adm. Code 101.
- i) *The Agency shall notify USEPA, in writing, of any petition for hearing brought under this Part involving a provision or denial of a Phase II acid rain permit within 30 days of the filing of the petition. USEPA may intervene as a matter of right in any such hearing. The Agency shall notify USEPA, in writing, of any determination or order in a hearing brought under this Section that interprets, voids, or otherwise relates to any portion of a Phase II acid rain permit. [415 ILCS 5/40.2(e)]*

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.304 Petition Content Requirements

- a) The petition must include:

- 1) Aa concise description of the CAAPP source for which the permit is sought;
 - 2) Aa statement of the Agency's decision or part thereof to be reviewed;
 - 3) Aa justification as to why the Agency's decision or part thereof was in error; and
 - 4) The other materials upon which the petitioner relies in its petition.
- b) The petition may include a request to stay the effectiveness of a denial of the CAAPP permit until final action is taken by the Board under Section 40.2 of the Act.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

SUBPART D: APPEAL OF AGENCY LEAKING UNDERGROUND STORAGE TANK (LUST) DECISIONS

Section 105.400 Parties

- a) Petitioner. The person who files a petition for review of the Agency's final decision made under Title XVI of the Act [415 ILCS 5/57 through 57.19] (or under the former Section 22.18b(g) of the Act) must be named as petitioner.
- b) Respondent. The Agency must be named as the respondent.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.402 Who May File a Petition for Review

Any owner or operator may file a petition for review under Section 40 of the Act of an Agency final determination made under Title XVI of the Act [415 ILCS 5/57-57.19] (or under the former Section 22.18b(g) of the Act). There are several Agency determinations that may be appealed under Section 40 of the Act.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.404 Time for Filing the Petition

Petitions must be filed in accordance with this Section or the Board does not have the authority to review the Agency's decision and will dismiss the proceeding on its own motion or on the motion of any party. Within 35 days after the date of service of the Agency's final decision the petitioner may file with the Clerk:

- a) A petition for review that contains the requirements of Section 105.408; or

- b) A request for an extension of time to file a petition for hearing under Section 105.406.

Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.406 Extension of Time to File a Petition for Review

Under Section 40(a)(1) of the Act, *the 35-day period for petitioning for a hearing may be extended by the applicant for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Agency within the initial appeal period.* [415 ILCS 5/40(c)] The applicant and the Agency must jointly file a request for extension with the Board within 35 days after the date of service of the Agency's final decision. Upon an appropriately filed request for an extension, the applicant has a period not exceeding 125 days after the date of service of the Agency's final decision to file a petition for review before the Board under Section 105.408.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.408 Petition Content Requirements

In addition to the requirements of 35 Ill. Adm. Code 101.Subpart C the petition must contain:

- a) The Agency's final decision;
- b) A statement specifying the date of service of the Agency's final decision; and
- c) A statement specifying the grounds of appeal.

Section 105.410 Agency Record

- a) The Agency must file the entire Agency record of its decision with the Board in accordance with Section 105.116.
- b) The Agency record must include:
 - 1) The plan or budget submittal or other request that requires an Agency decision;
 - 2) Correspondence with the petitioner and any documents or materials submitted by the petitioner to the Agency related to the plan or budget submittal or other request;
 - 3) The final determination letter; and
 - 4) Any other information the Agency relied upon in making its determination.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.412 Board Hearing

The Board will conduct a public hearing in accordance with 35 Ill. Adm. Code 101.Subpart F including any hearing held by videoconference (see 35 Ill. Adm. Code 101.600 (b)) upon an appropriately filed petition for review, unless a petition is disposed of by a motion for summary judgment brought under 35 Ill. Adm. Code 101.516. The hearing will be based exclusively on the Agency record before the Agency at the time the permit or decision was issued.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

SUBPART E: APPEAL OF OSFM LUST DECISIONS

Section 105.500 Applicability

This Subpart applies to proceedings before the Board concerning appeals from OSFM final determinations made under Section 57.9(c) of the Act.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.502 General Overview

OSFM final determinations are made either through the issuance of an "Eligibility and Deductibility Determination" letter or by the failure of OSFM to act upon receipt of an "Eligibility and Deductibility Determination" form within 60 days under Section 57.9(c)(2) of the Act. The process before the Board for review of final determinations by the OSFM includes the following steps. Upon receipt of a petition for review, unless the Board determines that the petition is insufficient, a hearing date and location will be assigned. Hearings will be publicly-noticed in the county where the underground storage tank site is located. If the parties enter into a settlement agreement prior to or during the hearing process, the parties may request that the Board accept and enter a final order adopting a proposed settlement agreement; the order may be requested with or without a hearing.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.504 General Requirements

- a) **Who May File.** Any owner or operator of an underground storage tank who has been issued an "Eligibility and Deductibility Determination" letter or who has not received an "Eligibility and Deductibility Determination" letter from the OSFM within the time prescribed by Section 57.9(c)(2) of the Act, which is deemed to be a final decision appealable to the Board, may file a petition with the Board seeking review of that final decision. The owner/operator must be named as the petitioner, and the OSFM must be named as the respondent. Filing requirements are set forth at 35 Ill. Adm. Code 101.Subpart C.

- b) **Timely Petition.** The petition for review must be filed with the Board within 35 days after the date of the OSFM's "Eligibility and Deductibility Determination" letter or within 35 days from the OSFM's final decision due to its failure to act as required under Section 57.9(c)(3) of the Act. There will be a rebuttable presumption that petitioner received the OSFM's "Eligibility and Deductibility Final Determination" letter four days from the date indicated on the letter.
- c) **Service and Filing.** The petitioner must serve all filings upon the OSFM in accordance with 35 Ill. Adm. Code 101.304(c). All filings must be accompanied by a notice of filing. Methods and documentation of service, as well as the effective date of service, are governed by 35 Ill. Adm. Code 101.Subpart C.

(Source: Amended at 39 Ill. Reg. 2369, effective January 27, 2015)

Section 105.506 Petition Content Requirements

In addition to the requirements of 35 Ill. Adm. Code 101.Subpart C the petition must include:

- a) A copy of the OSFM's "Eligibility and Deductibility Final Determination" letter;
- b) A complete and precise description of the underground storage tank site, including the location of the site, including the county, the number of underground storage tanks on-site, the substance(s) stored in each tank, the date of the tank's registration; and the date of Illinois Emergency Management Agency notification;
- c) A statement specifying the date of service of the OSFM's final determination letter and documentation to demonstrate the petition's timely filing;
- d) A statement specifying the grounds of appeal; and
- e) If the owner or operator is represented by counsel, an appearance must be filed in conjunction with the petition.

Section 105.508 OSFM Record and Appearance

- a) Within 14 days after a petition for review of an OSFM eligibility or deductibility determination, the attorney representing the OSFM must file an appearance with the Board.
- b) The OSFM must file the entire OSFM record of its decision with the Board in accordance with Section 105.116. The OSFM record must include:
 - 1) The request for OSFM determination of eligibility or deductibility;

- 2) Correspondence with the petitioner;
- 3) The denial letter; and
- 4) Any other information the OSFM relied upon in making its determination.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.510 Location of Hearing

The hearing will be held in Springfield, in Chicago, by videoconference (see 35 Ill. Adm. Code 101.600(b)), or in such other location as the hearing officer or the Board may designate to prevent material prejudice or undue delay. Upon the proceeding being set for hearing, the Clerk will cause notice of the hearing to be published. Public notice will be published at least 21 days before the hearing by public advertisement in a newspaper of general circulation in the county in which the LUST site in question is located. Nothing in this Section precludes holding the hearing by videoconference under 35 Ill. Adm. Code 101.600(b).

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

SUBPART F: PSD PERMIT APPEALS

Section 105.600 Applicability

This Subpart applies to proceedings before the Board concerning appeals from final PSD permit determinations made under Section 9.1(d) of the Act and 35 Ill. Adm. Code Part 204.

Section 105.602 Parties

- a) Petitioner. The person who files a petition for review of the Agency's final decision must be named the petitioner.
- b) Respondent. The Agency must be named the respondent. If a petition is filed under Section 105.604(c) of this Subpart by a person other than the permit applicant, the permit applicant must be named as a respondent in addition to the Agency.

Section 105.604 Who May File a Petition for Review

- a) If the Agency refused to grant or grants with conditions a PSD permit under Section 9.1(d) of the Act and 35 Ill. Adm. Code Part 204, the applicant may petition for a hearing before the Board to contest the decision of the Agency.
[415 ILCS 5 40.3(a)(1)]
- b) If the Agency fails to act on an application for a PSD permit within the time frame specified in Section 39(f)(3) of the Act, the applicant may petition for a hearing

before the Board to compel the Agency to act on the application in a time that is deemed reasonable by the Board. [415 ILCS 5/40.3(a)(1)]

- c) Any person who participated in the Agency public comment process for a PSD permit and is either aggrieved or has an interest that is or may be adversely affected by the PSD permit may petition for a hearing before the Board to contest the decision of the Agency. If the petitioner failed to participate in the Agency's public comment process, the person may still petition for hearing, but only upon issues where the final permit conditions reflect changes from the draft permit that was made available during the Agency public comment process. [415 ILCS 5/40.3(a)(2)]

Section 105.606 Time to File Petition for Review

- a) Except as provided in subsection (b), if a person who may petition the Board under Section 105.604 of this Subpart wishes to appeal the Agency's final decision to the Board under this Subpart, the person must file the petition with the Clerk within 35 days after the date of the Agency's final permit action.
- b) If the permit applicant wishes to appeal the Agency's failure to act on an application for a PSD permit within the time frame specified in Section 39(f)(3) of the Act, the person must file a petition for review with the Clerk before the Agency denies or issues the final permit.

Section 105.608 Petition Content Requirements

- a) For petitions under Section 105.604(a) or (c) of this Subpart, all pertinent information in support of each issue raised for review shall be contained within the body of the petition. The Board will not consider arguments, assertions, claims, or other information incorporated into the petition by reference. In addition to the requirements of 35 Ill. Adm. Code 101.Subpart C, the petition must include:
- i) The Agency's final decision or issued PSD permit;
- ii) A statement as to how the petitioner participated in the Agency public comment process;
- iii) All facts necessary to demonstrate that the petitioner is aggrieved or has an interest that is or may be adversely affected;
- iv) The issues proposed for review, citing to a specific permit term or condition where applicable and to the Agency record where those issues were raised with reasonable specificity during the public comment period, citing to any relevant page numbers in the public comments submitted to the Agency and attaching this public comment to the petition. If the issues

proposed for review were not raised with reasonable specificity during the public comment period, the petition must explain why such issues were not required to be raised during the Agency public comment process; and

v) An explanation why the Agency's previous response to the issues proposed for review, if any, was:

1. Clearly erroneous; or

2. An exercise of discretion or an important policy consideration that the Board should, in its discretion, review. [415 ILCS 5/40.3(a)(2)]

b) For petitions under Section 105.604(b) of this Subpart, in addition to the requirements of 35 Ill. Adm. Code 101, Subpart C, the petition must also include the date that a complete permit application for a PSD permit was submitted to the Agency and an explanation as to why the submittal made on such date made the application complete.

c) For petitions under Section 105.604(a) or (c) of this Subpart, the petition may include a request to stay the effectiveness of any final Agency action on a PSD permit application until final action is taken by the Board under Section 40.3 of the Act. Any stay request must include a clear delineation of all the contested conditions of the PSD permit. To the extent that a stay of any or all of the uncontested conditions of the permit is sought, any stay request must indicate how these uncontested conditions would be affected by the Board's review of the contested conditions.

d) For petitions under Section 105.604(c) of this Subpart, any stay request must also demonstrate:

i) That an immediate stay is required in order to preserve the status quo without endangering the public;

ii) That it is not contrary to public policy; and

iii) That there is a reasonable likelihood of success on the merits.

Section 105.610 Board Standards for Granting Stays

a) If requested by the permit applicant, the Board may stay the effectiveness of any final Agency action on a PSD permit application during the pendency of the review process. In such cases, the Board shall stay the effectiveness of all the contested conditions of the PSD permit and may stay the effectiveness of any or all uncontested conditions only if the Board determines that the uncontested conditions would be affected by its review of contested conditions. Any stays

granted by the Board shall be deemed effective upon the date of final Agency action appealed by the applicant. [415 ILCS 5/40.3(d)(2)]

- b) If requested by a party other than the permit applicant, the Board may stay the effectiveness of any final Agency action on a PSD permit application during the pendency of the review process. In such cases, the Board may stay the effectiveness of all the contested conditions of the PSD permit and may stay the effectiveness of any or all uncontested conditions only if the Board determines that the uncontested conditions would be affected by its review of contested conditions. The party requesting the stay has the burden of demonstrating that an immediate stay is required in order to preserve the status quo without endangering the public, that it is not contrary to public policy and that there is a reasonable likelihood of success on the merits. Any stays granted by the Board shall be deemed effective upon the date of final Agency action appealed under Section 105.606 of this Subpart and shall remain in effect until a decision is issued by the Board on the petition. [415 ILCS 5/40.3(d)(3)]

Section 105.612 The Agency Record

- a) The Agency must file a copy of its entire Agency record of its decision with the Clerk in accordance with Section 105.116.
- b) The Agency record must include:
- i) Any permit application or other request that resulted in the Agency's final decision;
 - ii) Correspondence with the applicant and any documents or material submitted by the applicant to the Agency related to the permit application;
 - iii) The project summary, statement of basis or fact sheet;
 - iv) The Agency public hearing record of any Agency public hearing held under 35 Ill. Adm. Code 252.205, including any transcripts and exhibits;
 - v) All written comments received during the Agency public comment period under 35 Ill. Adm. Code 252.201, including any extension or reopening under 35 Ill. Adm. Code 252.208;
 - vi) The response to comments required by 35 Ill. Adm. Code 252.210 and any new material placed in the Agency record under that Section;
 - vii) The final permit; and
 - viii) Any other information the Agency relied upon in making its final decision.

Section 105.614 Board Hearing

Except as provided in subsections (a) and (b), the Board will conduct a public hearing, in accordance with 35 Ill. Adm. Code 101. Subpart F, upon an appropriately filed petition for review under this Subpart. The hearing and decision of the Board will be based exclusively on the Agency record at the time the permit or decision was issued, unless the parties agree to supplement the Agency record. Any PSD permit issued by the Agency shall be upheld by the Board if the technical decisions contained therein reflect considered judgment by the Agency. [415 ILCS 5/40.3(d)(1)]

- a) The Board will not hold a hearing on a petition for review under this Subpart if the Board disposes of the petition on a motion for summary judgment brought under 35 Ill. Adm. Code 101.516.
- b) The Board will not hold a hearing on a petition for review under this Subpart if the Board determines that:
 - i) The petition is frivolous; or
 - ii) The petition lacks facially adequate factual statements as required by Section 105.608 of this Subpart.
- c) If the Board determines to hold a hearing, the Clerk will give notice of the hearing under 35 Ill. Adm. Code 101.602.

APPENDIX A Agency LUST Final Decisions that are Reviewable (Repealed)

(Source: Repealed at 41 Ill. Reg. 10084, effective July 5, 2017)

105.APPENDIX B Comparison of Former and Current Rules (Repealed)

(Source: Repealed at 29 Ill. Reg. 8811, effective June 8, 2005)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER II: ENVIRONMENTAL PROTECTION
AGENCY

PART 252
PUBLIC PARTICIPATION IN THE
AIR POLLUTION CONTROL PERMIT PROGRAM

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Section
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SUBPART D: AGENCY ACTION

Section
252.401 Final Permit Action

AUTHORITY: Implementing and authorized by Sections 4, 9.1(d), 9.1(e), and 39, 39.1(c) and 39.1(d) of the Environmental Protection Act [415 ILCS 5/4, 9.1(d), 9.1(e), 39, 39(f)(2), 39.1(c) and 39.1(d)].

SOURCE: Adopted at 4 Ill. Reg. 10, p. 246, effective February 22, 1980; old rules repealed and new rules adopted at 8 Ill. Reg. 8197, effective June 1, 1984; amended at 17 Ill. Reg. 9684, effective June 10, 1993; amended at 22 Ill. Reg. 19253, effective October 13, 1998; amended at 42 Ill. Reg. _____, effective _____.

SUBPART A: INTRODUCTION

Section 252.101 Purpose

These rules are adopted to:

- a) Specify public participation procedures which ~~must~~ shall accompany the processing of certain air pollution permit applications ~~for certain sources of air pollution~~ by the Illinois Environmental Protection Agency ~~(Agency)~~; and
- b) Provide the public with an opportunity to comment on certain proposed air pollution permits ~~for certain sources of air pollution~~ that ~~are~~ may be of public interest.

(Source: Amended at Ill. Reg. _____, effective _____ 1)

~~(Source: Amended at 17 Ill. Reg. 9684, effective June 10, 1993)~~

Section 252.102 Abbreviations and Acronyms

ACS	Alternative Control Strategies
Act	Illinois Environmental Protection Act
Agency	Illinois Environmental Protection Agency
Board	Illinois Pollution Control Board
CAA	Clean Air Act
CAAPP	Clean Air Act Permit Program
HAPs	Hazardous Air Pollutant
MACT	Maximum Achievable Control Technology
MSSCAM	Major Stationary Sources Construction and Modification
NSR	New Source Review
MANSR	Nonattainment Area New Source Review
PSD	Prevention of Significant Deterioration of Air Quality
USEPA	United States Environmental Protection Agency

(Source: Added at Ill. Reg. _____, effective _____ 1)

Section 252.103 Definitions

- a) NANSR means Illinois' rules for MSSCAM at 35 Ill. Adm. Code Part 203.
- b) Other terms in these rules have the same meaning as defined in Sections 3 and 39.5(1) of the Act and the Board Rules and Regulations on Air Pollution, 35 Ill. Adm. Code: Subtitle B, Chapter I, as appropriate to the subject matter of the provisions.

(Source: Added at Ill. Reg. _____,
effective _____)

Section 252.104~~2~~ Applicability

- a) This Part applies to all ~~permit~~-applications filed with the Agency for:
- 1) Permits for the construction of new major stationary source or a major modification of a major stationary source pursuant to the ~~Major Stationary Sources Construction and Modification, the New Source Review (NANSR)~~ rules, 35 Ill. Adm. Code Part 203, for major new sources and major modifications;
 - 2) Permits for the construction of a new major stationary source or a major modification of a major stationary source pursuant to the ~~federal rules for Prevention of Significant Deterioration of Air Quality (PSD)~~ rules, 35 Ill. Adm. Code Part 20440 CFR 52.21, for construction of major new sources and major modifications;
 - 3) Permits for the construction of a sources or a modifications of a source which would constitute ~~major a new major stationary sources or a major modifications of a major stationary source~~, subject to public ~~notice~~ participation pursuant to subsections (a)(1) or (2) ~~above~~, if they were not accompanied by contemporaneous emissions decreases or if federally enforceable significant restrictions were not placed on the source or modification by the permit;
 - 4) Permits for the use of ~~Alternative Control Strategies (ACS)~~ pursuant to 35 Ill. Adm. Code Part 202;
 - 5) Permits to operate sources pursuant to the CAAPP, Section 39.5 of the ~~Environmental Protection Act~~

~~+Act+, 415 ILCS 5/39.5, (the Clean Air Act Permit Program (CAAPP)) and significant modifications of any permit issued thereunder;~~

6) Permits to operate sources which contain federally enforceable conditions including permits which exclude sources from the applicability of the permitting requirements described in subsections (a)(1), (a)(2), or (a)(5) ~~above;~~

7) Permits for the construction, ~~or reconstruction,~~ ~~or modification of major sources of hazardous air pollutants (HAPs)~~ that require a determination of case-by-case ~~Maximum Achievable Control Technology (MACT), pursuant to Sections 9.1(d) and 39(f) of the Act, 415 ILCS 5/9.1(d) and 39(f), and Section 112(g) and Section 112(j) of the Clean Air Act (CAA), 42 USC 7412(g) and (j).~~

~~8) Permits for the construction of a source of public interest or~~ emission units of public interest at a source, the criteria for which are outlined in subsection (b) ~~below; and~~

9) Revisions to permits described in subsections (a)(1), (a)(2), (a)(3), (a)(4), (a)(5), (a)(6) and (a)(7) ~~above~~ as specified by applicable regulations. This Part shall apply to all revisions which: revise any standard established on a case-by-case basis; alter conditions imposed to meet requirements for emissions offsets; or relax testing, monitoring, recordkeeping, or reporting requirements.

b) The Director ~~of the Agency~~ shall determine whether a ~~source or emission units is~~ source or emission units are of public interest. In making the decision, the Director ~~of the Agency~~ shall consider:

- 1) The type of permit for which the application is made;
- 2) The nature and amount of pollutants which will be emitted by the source;
- 3) Possible effects of the emissions on health and the environment;
- 4) The location of the source;
- 5) The interest in the source exhibited by the public, based on comments and inquiries received by the Agency;

6) Other factors which are distinctive to the source;
and

7) The proposed action by the Agency.

(Source: Amended at Ill. Reg. _____,
effective _____)

~~(Source: Amended at 22 Ill. Reg. 19253, effective October
13, 1998)~~

Section 252.1035 Application for a Prevention of Significant
Deterioration PSD Permit

~~Applicable procedures of the Consolidated Permit
Regulations, 40 CFR 124, shall be followed for the
issuance of permits pursuant to the federal PSD rules
for new major stationary sources and major
modifications.~~

~~b) Applicable procedures of this Part shall also be
followed for issuance of such permits.~~

~~ac) The following shall apply regarding denials of PSD
permit applications:~~

~~1) The procedures of this Part shall also apply if
the Agency proposes to deny an application for a
PSD permit, if the reasons for denial are those
for which appeal to the Administrator of the
United States Environmental Protection Agency
(USEPA) would be necessary. Such reasons may
relate to requirements of the PSD rules which have
been subject to interpretation by USEPA, including
but not limited to the methodology for performing
air quality analyses, the need for gathering
site-specific ambient air quality data, the
procedures for evaluating Best Available Control
Technology (BACT), and the criteria used to
establish BACT.~~

~~b)2) For those PSD permits for which public comment is
required fFor a proposed denial of an application
for a PSD permit pursuant to subsection (1) above,
the following shall apply:~~

~~i) Where the procedures of this Part refer to a
draft permit, they shall also apply to a
draft permit denial letter; and~~

~~ii) Where the procedures of this Part refer to a
notice of intent to issue, they shall also~~

apply to a notice of intent to deny.

iii) Where the procedures of this Part refer to a final permit decision, they shall apply to a final permit denial letter.

~~3) Following a public comment period on the proposed denial of the permit, if the Agency determines that a permit should be issued, a public comment period shall be held on the proposed issuance of the permit.~~

~~(Source: Section repealed, new Section added at 17 Ill. Reg. 9684, effective June 10, 1993)~~

~~Section 252.104 Definitions~~

~~Terms in these rules have the same meaning as defined in Section 2 of the Act and the Pollution Control Board Rules and Regulations on Air Pollution, 25 Ill. Adm. Code, Subtitle 2, Chapter I, as appropriate to the subject matter of the permit.~~

~~(Source: Amended at 17 Ill. Reg. 9624, effective June 10, 1993)~~

~~Section 252.105 Consolidation~~

~~a) For a combined PSD and NAAQS permit, the Agency shall consolidate the public participation activities.~~

~~— For other permits subject to this Part, the Agency may consolidate the public participation activities for two or more permits subject to these rules when the operations to be permitted are similar, related, or in close geographical proximity, where practicable.~~

~~(Source: Amended at 17 Ill. Reg. 9624, effective June 10, 1993)~~

~~(Source: Amended at 17 Ill. Reg. 9624, effective June 10, 1993)~~

SUBPART B: PROCEDURES FOR PUBLIC REVIEW

Section 252.201 Notice and Opportunity to Comment

a) The Agency shall issue a notice for the planned issuance of any permit described in Section 252.104 and 2 of this Part and renewal of any operating permit described in Section 252.104.2 of this Part, and permit actions described in Section 252.104.3 of this Part.

b) The notice shall be given to:

- 1) The public, by prominent placement at a dedicated page on the Agency's website. Such notice shall remain on the Agency's website for the duration of the public comment period. If the Agency's website is unavailable for a prolonged period of time, the comment period will be extended for an equivalent amount of time. Notice shall also be by advertisement in a newspaper of general circulation in the area where the source is located if either:
 - A) The Director of the Agency or his/her designee determines for a particular permit that additional notice would serve the interests of the public or of the Agency. In making this determination, the Agency shall consider public interest; or
 - B) Pursuant to the Act or other applicable law, notice is required to be published in a newspaper for the type of permit at issue;
- 2) Local government air pollution control offices within Illinois that are in the area affected by the source;
- 3) The chief executives of the municipality and county in which the source is to be located, including the mayor or president, clerk, county board chairman, county clerk, and state's attorney;
- 4) Members of the General Assembly from the legislative district in which the source is located;
- 5) Any state whose air quality may be affected and which is contiguous to Illinois or which is within 50 miles of the source;
- ~~6) Other officials and agencies identified in 40 CFR 51.24(q)(iv) (1983) for PSD sources only;~~
- ~~7) The permit applicant; and~~
- ~~8) Persons on the public participation mailing list for the air pollution permit program;~~
- 8) For purposes of PSD permits, in addition to the notice given by means of subsections (b)(1) through (7), notice shall also be given to the USEPA; any comprehensive regional land use

planning agency for the area in which the source would be located; and any State Land Manager, Federal Land Manager, or Native American Governing Body whose lands may be affected by emissions from the regulated activity. -

~~4+3)~~ For purposes of CAAPP permits, in addition to the notice given by means of subsections (b)(1) through (7), the notice shall be given to USEPA when it is provided to the public.

c) The notice shall include:

- 1) The name and address of the applicant and the source, and the name and address of the Agency;
- ~~2)~~ ~~The location of the source if different from the applicant's address;~~
- ~~23)~~ The activity or activities involved in the permit action;
- ~~4)~~ ~~For a proposed significant modification, a description of the change in the amount or character of the emissions which may result from the modification;~~
- ~~35)~~ The preliminary decision of the Agency to grant the permit;
- ~~46)~~ For the proposed issuance of a PSD permit, the degree of ambient air increment consumed by the project;
- ~~57)~~ For a case-by-case MACT determination pursuant to Section 112(g) and ~~Section 112(j)~~ of the CAA, a description of the emission limitation or work practice standard in the draft permit that constitutes MACT;
- ~~68)~~ The location of the documents available for public review;
- ~~79)~~ A request for written comments on the Agency's draft ~~proposed~~ permit;
- ~~810)~~ The date the comment period closes;
- ~~911)~~ Instructions on how to request a public hearing if a decision to hold a hearing has not already been made pursuant to Section 252.205(a) or (b); and
- ~~1012)~~ The name, address, and telephone number of

the Agency contact person from whom the public may obtain additional information.

~~(Agency Note: Material properly claimed as trade secret or confidential pursuant to Sections 7 and 7.1 of the Act and 2 Ill. Adm. Code Part 1827 will not be subject to public disclosure under this Part. An applicant claiming a trade secret shall provide, in addition to the complete application, a copy of the application for public notice in which the material claimed as trade secret has been deleted.)~~

- d) The notice to the permit applicant shall also include the draft permit and project summary, fact sheet or statement of basis or fact sheet required by Section 252.203 of this Part.
- e) The notice shall provide for a 30-day public comment period. The Agency may extend the comment period upon written request if any applicable statutory period for the Agency decision, as prescribed in Section 39 of the Act, allows for an extension.

~~(Source: Amended at Ill. Reg. _____, effective _____)~~

~~(Source: Amended at 22 Ill. Reg. 19253, effective October 13, 1998)~~

Section 252.202 Draft Permit

The Agency shall prepare for public review a draft permit, with including findings and proposed conditions.

~~(Source: Amended at Ill. Reg. _____, effective _____)~~

~~(Source: Amended at 17 Ill. Reg. 9684, effective June 10, 1993)~~

Section 252.203 Project Summary, Fact Sheet and Statement of Basis or Fact Sheet

- a) The Agency shall prepare a project summary or statement of basis fact sheet to accompany the draft permit for a new major stationary new source, major existing source, or major modification of a major stationary source, issuance or renewal of a CAAPP permit or a significant modification of a CAAPP permit. The fact sheet project summary or statement of basis shall describe the basis of the Agency's decision to grant the permit. For purposes of PSD permits, this description shall also

including an explanation of the source's effect on ambient air quality.

- b) The Agency shall prepare a fact sheet statement of basis for every draft permit for which a project summary or statement of basis ~~fact sheet~~ is not prepared.

~~(Source: Section repealed, new Section added at 17 Ill. Reg. 2684, effective June 10, 1993)~~

~~(Source: Amended at Ill. Reg. _____, effective _____)~~

Section 252.204 Availability of Documents

- a) Copies of the following documents shall be made available for public inspection during the public comment period:
- 1) The public notice;
 - 2) The project summary, fact sheet or statement of basis or fact sheet;
 - 3) The draft permit;
 - 4) The permit application, including any compliance plans;
 - 5) For purposes of a draft PSD permit, this shall also include any additional supporting data furnished by the applicant and other information the Agency relied upon in making its proposed decision.
- b) A copy of the draft permit shall be placed at a dedicated page on the Agency's website for the duration of the public comment period. Copies of the other documents listed in subsection (a) shall be available for review at:
- 1) The Bureau of Air's offices at 1021 North Grand Avenue East, Springfield, Illinois 62794-9276; and
 - 2) The Bureau of Air's regional office closest to the location of the source.
- c) All documents listed in subsection (a) ~~above~~ shall also be available in accordance with procedures of the Agency and of the ~~Pollution Control Board~~ adopted pursuant to 35 Ill. Adm. Code Part 130.420, and Sections 7 and 7.1 of the Act.

~~(Source: Amended at Ill. Reg. effective)~~

~~(Source: Section repealed, new Section added at 17 Ill. Reg. 9684, effective June 10, 1993)~~

Section 252.205 Opportunity for Public Hearing

a) A public hearing shall be held on any action subject to these rules where applicable law or rule provides the applicant opportunity for hearing and the applicant makes a written request for a hearing.

b) The Director of the Agency or his/her designee shall order that a hearing be held on a permit application subject to these rules when the Agency has determined that a hearing would serve the interests of the public or of the Agency. In making this determination, the Agency shall consider:

- 1) The level of public interest as indicated by the inquiries and comments received by the Agency on the draft permit;
- 2) The opportunity to increase public understanding of the project and of the Agency's proposed decision by means of public hearing;
- 3) Receipt by the Agency of a written request for a hearing citing material issues with respect to the terms and conditions of the draft permit from:

- A) A significant number of persons, to be determined by the Director of the Agency, either individually or in a petition;
- B) A member of the General Assembly representing the district in which the source is located; or
- C) A chief executive officer from a county or municipality in which the source is located as described in Section 252.201(b)(3) ~~of this Part.~~

~~(Source: Added at 17 Ill. Reg. 9684, effective June 10, 1993)~~

~~(Source: Amended at Ill. Reg. effective)~~

Section 252.206 Procedures for Public Hearings

a) Except as provided in subsection (b) ~~below~~, hearings

shall be conducted in accordance with the Agency's "Procedures for Permit and Closure Plan Hearings" (35 Ill. Adm. Code Part 166: Subpart A, Informational Permit and Closure Plan Hearings).

- b) The following types of hearings shall be conducted in accordance with the Agency's "Procedures for Permit and Closure Plan Hearings" (35 Ill. Adm. Code Part 166: Subpart B, Contested Case Permit Hearings):

~~1) Hearings requested by the applicant pursuant to Section 39(f)(3) of the Act on a proposed action which includes the Agency's determination with respect to BACT or LAR or case-by-case MACT;~~

2) Hearings requested by the ACS permit applicant pursuant to Section 39.1(d) of the Act.

- c) Notwithstanding subsection (b) ~~above~~, persons requesting hearings subject to the Contested Case Permit Hearings (35 Ill. Adm. Code Part 166: Subpart B) may waive their rights to the procedures of the Contested Case Permit Hearings by notifying the hearing officer to that effect. Where persons waive their rights to Contested Case Permit Hearings, such hearings shall be held in accordance with the procedures of Informational Permit and Closure Plan Hearings (35 Ill. Adm. Code Part 166: Subpart A).

~~(Source: Added at 23 Ill. Reg. 19293, effective October 13, 1998)~~

(Source: Amended at Ill. Reg. _____,
effective _____)

Section 252.207 Obligation to Raise Issues and Provide Information During the Public Comment Period for PSD Permits

All persons, including applicants, who believe any condition of a draft PSD permit is inappropriate or that the Agency's tentative decision to prepare a draft PSD permit is inappropriate, shall raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close of the public comment period. Any supporting materials which are submitted shall be submitted in full and may not be incorporated by reference, unless they are already part of the administrative record in the same proceeding, or consist of State or Federal statutes and regulations, USEPA documents of general applicability, or other generally available reference materials.

(Source: Added at Ill. Reg. _____,
effective _____)

Section 252.208 Reopening of the Public Comment Period for
PSD Permits

- a) The Agency may order the public comment period reopened. The public notice of any comment period under this paragraph shall be issued under Section 252.201, and shall define the scope of the reopening including an identification of those issues to which the requirements of this Section apply.
- b) Comments filed during the reopened comment period shall be limited to the issues that are the subject of the reopened public comment period as set forth in the notice that caused its reopening. When the public comment period is reopened under this Section, all persons, including the applicant, who believe any relevant condition of a draft permit is inappropriate or that the Agency's decision to prepare a draft permit is inappropriate, shall submit all reasonably available factual grounds supporting their position, including all supporting material, by the close of the public comment period.

(Source: Added at Ill. Reg. _____,
effective _____)

Section 252.209 Issuance of a Final PSD Permit Decision

After the close of the public comment period on a draft PSD permit under Section 252.201 or 252.208, the Agency shall provide notice of the final PSD permit decision to the applicant and each person who has submitted written comments or requested notice of the final permit decision. This notice shall include reference to the procedures for appealing a decision on the final PSD permit under Section 40.3 of the Act and 35 Ill. Adm. Code 105. For purposes of this Section, a final permit decision means a final decision to issue, deny or modify a PSD permit.

(Source: Added at Ill. Reg. _____,
effective _____)

Section 252.210 Response to Comments for a Final PSD Permit
Decision

- a) By the date that any final PSD permit decision is issued, the Agency shall consider all written comments submitted by the close of the public comment period and all comments formally made at any public hearing. The Agency shall issue a response to comments that shall briefly describe and respond to all significant

comments on the draft permit raised during the public comment period, or during any hearing. The Agency may group related comments together and provide one unified response for each issue raised; and

- b) Any documents, excluding statutory or regulatory references, cited in the response to comments shall be included in the administrative record for the final permit decision. If new points are raised or new material supplied during the public comment period, the Agency may, in addition to formally providing a written response to comments, document its response to those matters by adding new materials to the administrative record.

(Source: Added at Ill. Reg. _____,
effective _____)

Section 252.211 Administrative Record for a Final PSD Permit Decision

- a) The Agency shall base final PSD permit decisions on the administrative record as defined in 252.211(b)(1) through (9) of this Section.
- b) In addition to the final permit decision, the administrative record for any final permit decision shall consist of:
- 1) The application and any supporting data furnished by the applicant;
 - 2) The draft permit or notice of intent to deny the application;
 - 3) The project summary, statement of basis or fact sheet;
 - 4) All documents cited in the project summary, statement of basis or fact sheet;
 - 5) All comments received during the public comment period under Section 252.201 (including any reopening under Section 252.208);
 - 6) The transcript of any hearing held under Section 252.205;
 - 7) Any written materials submitted to the Hearing Officer at such a hearing;
 - 8) The response to comments required by Section 252.210 and any new material placed in the record

under that Section; and

- 9) Any other information contained in the supporting file for the final permit decision and any other information the Agency relied upon in making its final decision.

(Source: Added at Ill. Reg. _____,
effective _____)

SUBPART C: USEPA REVIEW OF CAAPP PERMITS AND OBJECTION PROCEDURES

Section 252.301 USEPA Review of and Objection to Proposed CAAPP Permits

- ~~a) Notice shall be provided to USEPA at the same time it is provided to the public pursuant to Section 252.201 of this Part.~~
- ~~a)~~ For draft CAAPP permits ~~subject to review under Section 39.5 of the Act,~~ following the public notice and comment period provided for by Section 252.201 ~~of this Part,~~ the Agency shall consider all comments received, and determine the contents of a proposed CAAPP permit. The proposed CAAPP permit shall be provided to USEPA for review and comment for a period of 45 days unless USEPA waives review.
- ~~b)~~ If USEPA objects to the contents of a proposed CAAPP permit in writing and with a justification for its objections as provided in Title V of the ~~CAAClean Air Act~~ as amended (42 USC 17401 et seq.) and regulations promulgated thereunder, the Agency shall respond to USEPA's objection. The Agency shall provide the applicant and any person who participated in the public comment process under this Part 10 days to submit written comments to the Agency contact person described at Section 252.201(c) ~~(121) of this Part~~ regarding any revisions which the Agency is proposing to make in response to USEPA's objections. The Agency may then revise and resubmit the proposed CAAPP permit without any further public participation within 90 days after the date of the objection.
- ~~c)~~ If USEPA does not object to the contents of a proposed CAAPP permit in writing and with a justification for its objections in accordance with procedures established under Title V of the ~~CAAlean Air Act~~ as amended, the Agency shall issue the proposed permit as the CAAPP permit without further change.
- ~~d)~~ If USEPA does not object in writing to issuance of a

proposed CAAPP permit, any person may petition USEPA within 60 days after expiration of the 45-day review period to make such objection in accordance with applicable procedures established under Title V of the ~~Clean Air Act~~.

- (e) If the CAAPP permit has not yet been issued and USEPA objects to the proposed permit as a result of a petition, the Agency shall not issue the permit until USEPA's objection has been resolved. The Agency shall provide for a 10-day comment period as set forth in subsection (b) ~~above~~. A petition does not, however, stay the effectiveness of a permit or its requirements if the permit was issued after expiration of the 45-day review period and prior to a USEPA objection.
- (f) If the Agency has issued a CAAPP permit after expiration of the 45-day review period and prior to receipt of a USEPA objection, the Agency may, after receiving an objection from USEPA, revise and resubmit the permit to USEPA after providing for 10-day comment period as set forth in subsection (b) ~~above~~. If the Agency fails to submit a revised permit in response to the objection, USEPA shall modify, terminate or revoke the permit, pursuant to the ~~Clean Air Act~~ as amended.

~~(Source: Added at 17 Ill. Reg. 9384, effective June 10, 1993)~~

~~(Source: Amended at 39 Ill. Reg. effective _____)~~

SUBPART D: AGENCY ACTION

Section 252.401 Final Permit Action

After the close of the comment period including the period for USEPA's review of a proposed permit, the Agency shall take final action. The Agency shall notify the applicant and each person who has submitted written comments or requested notice of the final permit decision.

(Source: Added at 17 Ill. Reg. 9684, effective June 10, 1993)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER a: PERMITS AND GENERAL PROVISIONS

PART 204
PREVENTION OF SIGNIFICANT DETERIORATION

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Section

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204.210	Actual Emissions
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204.240	Baseline Actual Emissions
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204.380	Excessive Concentration
204.390	Federal Land Manager
204.400	Federally Enforceable
204.410	Fugitive Emissions
204.420	Good Engineering Practice
204.430	Greenhouse Gases (GHGs)
204.440	High Terrain
204.450	Indian Reservation
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204.470	Innovative Control Technology

204.480	Low Terrain
204.490	Major Modification
204.500	Major Source Baseline Date
204.510	Major Stationary Source
204.520	Minor Source Baseline Date
204.530	Nearby
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204.550	Net Emissions Increase
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204.600	Projected Actual Emissions
204.610	Regulated NSR Pollutant
204.620	Replacement Unit
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204.810	Source Information
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SUBPART E: STACK HEIGHTS

Section

204.1000 Stack Heights

**SUBPART F: REQUIREMENTS FOR MAJOR STATIONARY SOURCES AND
MAJOR MODIFICATIONS IN ATTAINMENT AND UNCLASSIFIABLE AREAS**

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SUBPART G: ADDITIONAL REQUIREMENTS FOR CLASS I AREAS

Section

204.1200 Additional Requirements for Sources Impacting Federal Class I Areas

**SUBPART H: GENERAL OBLIGATIONS OF THE ILLINOIS ENVIRONMENTAL
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Section

204.1300 Notification of Application Completeness to Applicants
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204.1400 Recordkeeping and Reporting Requirements for Certain Projects at Major
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SUBPART J: INNOVATIVE CONTROL TECHNOLOGY

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Section

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204.1910	Transition Requirements

AUTHORITY: Implementing Section 9.1 and 10 and authorized by Section 27 and 28.5 of the Environmental Protection Act (Ill. Rev. Stat. 1991, ch. 111 1/2, pars. 1009.1, 1010, and 1027) [415 ILCS 5/9.1, 10 27 and 28.5].

SOURCE: Adopted and codified at, effective; codified at

SUBPART A: GENERAL PROVISIONS

Section 204.100 Incorporations by Reference

The following materials are incorporated by reference. These incorporations do not include any later amendments or editions.

- a) 40 CFR Part 50
- b) 40 CFR Part 51
- c) 40 CFR Part 52

d) 40 CFR Part 53
e) 40 CFR Part 54
f) 40 CFR Part 55
g) 40 CFR Part 56
h) 40 CFR Part 57
i) 40 CFR Part 58
j) 40 CFR Part 59
k) 40 CFR Part 60
l) 40 CFR Part 61
m) 40 CFR Part 62
n) 40 CFR Part 63
o) 40 CFR Part 64
p) 40 CFR Part 65
q) 40 CFR Part 66
r) 40 CFR Part 67
s) 40 CFR Part 68
t) 40 CFR Part 69
u) 40 CFR Part 70
v) 40 CFR Part 71
w) 40 CFR Part 72
x) 40 CFR Part 73
y) 40 CFR Part 74
z) 40 CFR Part 75
aa) 40 CFR Part 76
bb) 40 CFR Part 77
cc) 40 CFR Part 78
dd) 40 CFR Part 79
ee) 40 CFR Part 80
ff) 40 CFR Part 81
gg) 40 CFR Part 82
hh) 40 CFR Part 83
ii) 40 CFR Part 84
jj) 40 CFR Part 85
kk) 40 CFR Part 86
ll) 40 CFR Part 87
mm) 40 CFR Part 88
nn) 40 CFR Part 89
oo) 40 CFR Part 90
pp) 40 CFR Part 91
qq) 40 CFR Part 92
rr) 40 CFR Part 93
ss) 40 CFR Part 94
tt) 40 CFR Part 95
uu) 40 CFR Part 96
vv) 40 CFR Part 97
ww) 40 CFR Part 98

xx) 40 CFR Part 99

Section 204.110 Abbreviations and Acronyms

The following abbreviations and acronyms are used in this Part:

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
Act	Illinois Environmental Protection Act
BACT	Best Available Control Technology
Board	Illinois Pollution Control Board
CAA	Clean Air Act
CAAPP	Clean Air Act Permit Program
CEMS	Continuous Emissions Monitoring System
CERMS	Continuous Emissions Rate Monitoring System
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CPMS	Continuous Parameter Monitoring System
GHG	Greenhouse Gas
H_2S	hydrogen sulfide
hr	hour
Illinois EPA	Illinois Environmental Protection Agency
LAER	Lowest Achievable Emission Rate
lbs	pounds
lb/hr	pounds per hour
MW	megawatts
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
NSPS	New Source Performance Standards
NSR	New Source Review
O_2	oxygen
PAL	Plantwide Applicability Limitation
PEMS	Predictive Emissions Monitoring System
PM	Particulate Matter
$\text{PM}_{2.5}$	Particulate Matter equal to or less than 2.5 microns in diameter (Fine Particulate Matter)
PM_{10}	Particulate Matter equal to or less than 10 microns in diameter
ppm	parts per million
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIP	State Implementation Plan
SO_2	sulfur dioxide
tpy	tons per year
TSP	total suspended particulates
US	United States

USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
VOM	Volatile Organic Material
yr	year

Section 204.120 Severability

If any provision of this Part, or the application of such provision to any person or circumstance, is held invalid, the remainder of this Part, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

SUBPART B: DEFINITIONS**Section 204.200 Definitions**

Unless otherwise specified in this Part, the definitions of the terms used in this Part shall be the same as those used in the Board Rules and Regulations at 35 Ill. Adm. Code Part 211.

Section 204.210 Actual Emissions

- a) "Actual emissions" means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with subsections (b) through (d) of this Section, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under Subpart K. Instead, Sections 204.240 and 204.600 shall apply for those purposes.
- b) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The Illinois EPA shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
- c) The Illinois EPA may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- d) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

Section 204.220 Adverse Impact on Visibility

"Adverse impact on visibility" means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the

Federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with (1) times of visitor use of the Federal Class I area, and (2) the frequency and timing of natural conditions that reduce visibility.

Section 204.230 Allowable Emissions

“Allowable emissions” means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

- a) The applicable standards as set forth in 40 CFR Parts 60, 61, 62 and 63;
- b) The applicable SIP emissions limitation, including those with a future compliance date; or
- c) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

Section 204.240 Baseline Actual Emissions

“Baseline actual emissions” means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with subsections (a) through (d) of this Section

- a) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The Illinois EPA shall allow the use of a different time period upon a determination that it is more representative of normal source operation.
 - 1) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
 - 2) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.
 - 3) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A

different consecutive 24-month period can be used for each regulated NSR pollutant.

- 4) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subsection (a)(2) of this Section.
- b) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the reviewing authority for a permit required under 40 CFR 52.21 or by the Illinois EPA for a permit required by the SIP, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990.
- 1) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
 - 2) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.
 - 3) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. "Currently" in the context of a contemporaneous emissions change refers to limitations on emissions and source operation that existed just prior to the date of the contemporaneous change. However, if an emission limitation is part of a Maximum Achievable Control Technology standard that the USEPA proposed or promulgated under 40 CFR Part 63, the baseline actual emissions need only be adjusted if the Illinois EPA has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G).
 - 4) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

- 5) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subsections (b)(2) and (b)(3).
- c) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.
- d) For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in subsection (a) of this Section, for other existing emissions units in accordance with the procedures contained in subsection (b) of this Section, and for a new emissions unit in accordance with the procedures contained in subsection (c) of this Section.

Section 204.250 Baseline Area

- a) "Baseline area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable under Section 107(d)(1)(A)(ii) or (iii) of the CAA (42 USC 7407(d)(1)(A)(ii) or (iii)) in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the baseline date is established, as follows: Equal to or greater than 1 $\mu\text{g}/\text{m}^3$ (annual average) for SO_2 , NO_2 , or PM_{10} ; or equal to or greater than 0.3 $\mu\text{g}/\text{m}^3$ (annual average) for $\text{PM}_{2.5}$.
- b) Area redesignations under Section 107(d)(1)(A)(ii) or (iii) of the CAA (42 USC 7407(d)(1)(A)(ii) or (iii)) cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:
 - 1) Establishes a minor source baseline date; or
 - 2) Is subject to this Part and would be constructed in the State proposing the redesignation.
- c) Any baseline area established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM_{10} increments, except that such baseline area shall not remain in effect if the Illinois EPA rescinds the corresponding minor source baseline date in accordance with Section 204.520(c).

Section 204.260 Baseline Concentration

- a) "Baseline concentration" means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:
 - 1) The actual emissions, as defined in Section 204.210, representative of sources in existence on the applicable minor source baseline date, except as provided in subsection (b) of this Section; and
 - 2) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.
- b) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):
 - 1) Actual emissions, as defined in Section 204.210, from any major stationary source on which construction commenced after the major source baseline date. For a major stationary source in existence on the major source baseline date, "actual emissions" for the purposes of this subsection shall mean increases or decreases in actual emissions resulting from construction commencing after the major source baseline date; and
 - 2) Actual emissions increases and decreases, as defined in Section 204.210, at any stationary source occurring after the minor source baseline date.

Section 204.270 Begin Actual Construction

"Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework, and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

Section 204.280 Best Available Control Technology (BACT)

"Best Available Control Technology" means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the Illinois EPA, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant. In no event shall application of BACT result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60, 61, 62

and 63. If the Illinois EPA determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

Section 204.290 Building, Structure, Facility, or Installation

- a) "Building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same first two-digit code) as described in the *Standard Industrial Classification Manual, 1972*, as amended by the 1977 Supplement (U. S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).
- b) Notwithstanding the provisions of subsection (a) of this Section, building, structure, facility, or installation means, for onshore activities under Standard Industrial Classification (SIC) Major Group 13: Oil and Gas Extraction, all of the pollutant-emitting activities included in Major Group 13 that are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant emitting activities shall be considered adjacent if they are located on the same surface site; or if they are located on surface sites that are located within $\frac{1}{4}$ mile of one another (measured from the center of the equipment on the surface site) and they share equipment. Shared equipment includes, but is not limited to, produced fluids storage tanks, phase separators, natural gas dehydrators or emissions control devices. Surface site, as used in this subsection, has the same meaning as in 40 CFR 63.761.

Section 204.300 Clean Coal Technology

"Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of SO₂ or NO_x associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

Section 204.310 Clean Coal Technology Demonstration Project

"Clean coal technology demonstration project" means a project using funds appropriated under the heading "Department of Energy – Clean Coal Technology," up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects

funded through appropriations for the USEPA. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

Section 204.320 Commence

“Commence” as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

- a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
- b) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

Section 204.330 Complete

“Complete” means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.

Section 204.340 Construction

“Construction” means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.

Section 204.350 Dispersion Technique

- a) “Dispersion technique” means any technique which attempts to affect the concentration of a pollutant in the ambient air by:
 - 1) Using that portion of a stack which exceeds good engineering practice stack height;
 - 2) Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or
 - 3) Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise.
- b) The preceding sentence in Section 204.350(a) does not include:

- 1) The reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the stationary source generating the gas stream;
- 2) The merging of exhaust gas streams where:
 - A) The source owner or operator demonstrates that the stationary source was originally designed and constructed with such merged gas streams;
 - B) After July 8, 1985, such merging is part of a change in operation at the stationary source that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion from the definition of dispersion techniques shall apply only to the emission limitation for the pollutant affected by such change in operation; or
 - C) Before July 8, 1985, such merging was part of a change in operation at the stationary source that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or, in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the Illinois EPA shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the Illinois EPA shall deny credit for the effects of such merging in calculating the allowable emissions for the source;
- 3) Smoke management in agricultural or silvicultural prescribed burning programs;
- 4) Episodic restrictions on residential wood burning and open burning; or
- 5) Techniques under subsection (a)(3) of this Section which increase final exhaust gas plume rise where the resulting allowable emissions of SO₂ from the stationary source do not exceed 5,000 tpy.

Section 204.360 Electric Utility Steam Generating Unit

“Electric utility steam generating unit” means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale.

Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

Section 204.370 Emissions Unit

“Emissions unit” means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in Section 204.360. For purposes of this Part, there are two types of emissions units as described in subsections (a) and (b) of this Section.

- a) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.
- b) An existing emissions unit is any emissions unit that does not meet the requirements in subsection (a) of this Section. A replacement unit, as defined in Section 204.620, is an existing emissions unit.

Section 204.380 Excessive Concentration

“Excessive concentration” is defined for the purpose of determining good engineering practice stack height under Section 204.420(c) and means:

- a) For sources seeking credit for stack height exceeding that established under Section 204.420(b), a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and which contributes to a total concentration due to emissions from all sources that is greater than an ambient air quality standard. For sources subject to this Part, an excessive concentration alternatively means a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and greater than an ambient air increment under Section 204.900. The allowable emission rate to be used in making demonstrations of excessive concentration shall be prescribed by the NSPS that is applicable to the source category unless the owner or operator demonstrates that this emission rate is infeasible. Where such demonstrations are approved by the Illinois EPA, an alternative emission rate shall be established in consultation with the source owner or operator.
- b) For sources seeking credit for increases in existing stack heights up to the heights established under Section 204.420(b), either (i) a maximum ground-level

concentration due in whole or part to downwash, wakes or eddy effects as provided in subsection (a) of this Section, except that the emission rate specified by the SIP (or, in the absence of such a limit, the actual emission rate) shall be used, or (ii) the actual presence of a local nuisance caused by the existing stack, as determined by the Illinois EPA; and

- c) For sources seeking credit for a stack height determined under Section 204.420(b) where the Illinois EPA requires the use of a field study or fluid model to verify good engineering practice stack height, for sources seeking stack height credit based on the aerodynamic influence of cooling towers, and for sources seeking stack height credit based on the aerodynamic influence of structures not adequately represented by the equations in Section 204.420(b), a maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects that is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.

Section 204.390 Federal Land Manager

“Federal Land Manager” means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

Section 204.400 Federally Enforceable

“Federally enforceable” means all limitations and conditions which are enforceable by the USEPA, including those requirements developed pursuant to 40 CFR Parts 60,61, 62 and 63, requirements within the SIP, any permit requirements established pursuant to 40 CFR 52.21 or this Part or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an USEPA-approved program that is incorporated into the SIP and expressly requires adherence to any permit issued under such program.

Section 204.410 Fugitive Emissions

“Fugitive emissions” means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

Section 204.420 Good Engineering Practice

“Good engineering practice,” with respect to stack height, means the greater of:

- a) 65 meters, measured from the ground-level elevation at the base of the stack;
- b) The following:
 - 1) For a stack in existence on January 12, 1979, and for which the owner or operator had obtained all necessary preconstruction approvals or permits required under 40 CFR Part 52:

$$H_g = 2.5H,$$

provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation;

- 2) For all other stacks:

$$H_g = H + 1.5L$$

where:

H_g = good engineering practice stack height, measured from the ground-level elevation at the base of the stack,

H = height of nearby structure(s) measured from the ground-level elevation at the base of the stack,

L = lesser dimension, height or projected width, of nearby structure(s) provided that the USEPA or Illinois EPA may require the use of a field study or fluid model to verify good engineering practice stack height for the source; or

- c) The height demonstrated by a fluid model or a field study approved by the USEPA or Illinois EPA, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features.
- d) For purposes of this definition, "stack" means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.

Section 204.430 Greenhouse Gases (GHGs)

"Greenhouse gases (GHGs)" means the air pollutant defined in 40 CFR 86.1818-12(a) as the aggregate group of six greenhouse gases: CO₂, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. To represent an amount of GHGs emitted, the term "tpy CO₂ equivalent emissions (CO₂e)" shall be used and computed as follows:

- a) Multiply the mass amount of emissions (tpy), for each of the six greenhouse gases in the pollutant GHGs, by the gas's associated global warming potential published at Table A-1 to Subpart A of 40 CFR Part 98—Global Warming Potentials.
- b) Sum the resultant value for each gas to compute a tpy CO₂e.

Section 204.440 High Terrain

“High terrain” means any area having an elevation 900 feet or more above the base of the stack of a source.

Section 204.450 Indian Reservation

“Indian Reservation” means any federally recognized reservation established by Treaty, Agreement, executive order, or act of Congress.

Section 204.460 Indian Governing Body

“Indian Governing Body” means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the US and recognized by the US as possessing power of self-government.

Section 204.470 Innovative Control Technology

“Innovative control technology” means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.

Section 204.480 Low Terrain

“Low terrain” means any area other than high terrain.

Section 204.490 Major Modification

- a) “Major modification” means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in Section 204.670) of a regulated NSR pollutant (as defined in Section 204.610) other than GHGs (as defined in Section 204.430); and a significant net emissions increase of that pollutant from the major stationary source.
- b) Any significant emissions increase (as defined in Section 204.670) from any emissions units or net emissions increase (as defined in Section 204.550) at a major stationary source that is significant for VOM or NO_x shall be considered significant for ozone.
- c) A physical change or change in the method of operation shall not include:
 - 1) Routine maintenance, repair and replacement;
 - 2) Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental

Coordination Act of 1974 (15 USC 791) (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act (16 USC 791);

- 3) Use of an alternative fuel by reason of an order or rule under Section 125 of the CAA (42 USC 7425);
 - 4) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
 - 5) Use of an alternative fuel or raw material by a stationary source which:
 - A) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or this Part; or
 - B) The source is approved to use under any permit issued under 40 CFR 52.21 or this Part;
 - 6) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or this Part.
 - 7) Any change in ownership at a stationary source.
 - 8) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:
 - A) The Illinois' SIP, and
 - B) Other requirements necessary to attain and maintain the NAAQS during the project and after it is terminated.
 - 9) The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.
- d) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under Subpart K for a PAL for that pollutant. Instead, the definition at Section 204.1720 shall apply.

Section 204.500 Major Source Baseline Date

“Major source baseline date” means:

- a) In the case of PM₁₀ and SO₂, January 6, 1975;
- b) In the case of NO₂, February 8, 1988; and
- c) In the case of PM_{2.5}, October 20, 2010.

Section 204.510 Major Stationary Source

- a) “Major stationary source” means:
 - 1) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tpy or more of any regulated NSR pollutant: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants (with thermal dryers), primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140), fossil-fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;
 - 2) Notwithstanding the stationary source size specified in subsection (a)(1) of this Section, any stationary source which emits, or has the potential to emit, 250 tpy or more of a regulated NSR pollutant (except GHGs as defined in 204.430); or
 - 3) Any physical change that would occur at a stationary source not otherwise qualifying under this Section, as a major stationary source, if the changes would constitute a major stationary source by itself.
- b) A major source that is major for VOM or NO_x shall be considered major for ozone.

- c) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this Section whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:

- 1) Coal cleaning plants (with thermal dryers);
- 2) Kraft pulp mills;
- 3) Portland cement plants;
- 4) Primary zinc smelters;
- 5) Iron and steel mills;
- 6) Primary aluminum ore reduction plants;
- 7) Primary copper smelters;
- 8) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- 9) Hydrofluoric, sulfuric, or nitric acid plants;
- 10) Petroleum refineries;
- 11) Lime plants;
- 12) Phosphate rock processing plants;
- 13) Coke oven batteries;
- 14) Sulfur recovery plants;
- 15) Carbon black plants (furnace process);
- 16) Primary lead smelters;
- 17) Fuel conversion plants;
- 18) Sintering plants;
- 19) Secondary metal production plants;
- 20) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;
- 21) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
- 22) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- 23) Taconite ore processing plants;
- 24) Glass fiber processing plants;
- 25) Charcoal production plants;
- 26) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; and
- 27) Any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the CAA.

Section 204.520 Minor Source Baseline Date

- a) "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21

or this Part submits a complete application under the relevant regulations. The trigger date is:

- 1) In the case of PM₁₀ and SO₂, August 7, 1977;
 - 2) In the case of NO₂, February 8, 1988; and
 - 3) In the case of PM_{2.5}, October 20, 2011.
- b) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:
- 1) The area in which the proposed source or modification would construct is designated as attainment or unclassifiable under Section 107(d)(1)(A)(ii) or (iii) of the CAA (42 USC 7407(d)(1)(A)(ii) or (iii)) for the pollutant on the date of its complete application under 40 CFR 52.21 or this Part; and
 - 2) In the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.
- c) Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM₁₀ increments, except that the Illinois EPA shall rescind a minor source baseline date where it can be shown, to the satisfaction of the Illinois EPA, that the emissions increase from the major stationary source, or net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM₁₀ emissions.

Section 204.530 Nearby

“Nearby,” with respect to a specific structure or terrain feature:

- a) For purposes of applying the formulae provided in Section 204.420(b) means that distance up to five times the lesser of the height or the width dimension of a structure, but not greater than 0.8 km (1/2 mile), and
- b) For conducting demonstrations under Section 204.420(c) means not greater than 0.8 km (1/2 mile), except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to 10 times the maximum height (Ht) of the feature, not to exceed 2 miles if such feature achieves a height (Ht) 0.8 km from the stack that is at least 40 percent of the good engineering practice stack height determined by the formulae provided in Section 204.420(b)(2) or 26 meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

Section 204.540 Necessary Preconstruction Approvals or Permits

“Necessary preconstruction approvals or permits” mean those permits or approvals required under Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable SIP.

Section 204.550 Net Emissions Increase

- a) “Net emissions increase” means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:
 - 1) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to Section 204.800(d); and
 - 2) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this subsection shall be determined as provided in Section 204.240, except that Sections 204.240(a)(3) and 204.240(b)(4) shall not apply.
- b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
 - 1) The date five years before construction on the particular change commences; and
 - 2) The date that the increase from the particular change occurs.
 - 3) An increase or decrease in actual emissions is creditable only if the reviewing authority has not relied on it in issuing a permit for the source under 40 CFR 52.21 or this Part, which permit is in effect when the increase in actual emissions from the particular change occurs.
- c) An increase or decrease in actual emissions of SO₂, PM, or NO_x that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.
- d) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.

- e) A decrease in actual emissions is creditable only to the extent that:
 - 1) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
 - 2) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins; and
 - 3) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- f) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. Any emissions unit that replaces an existing emissions unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- g) Subsection 204.210(b) shall not apply for determining creditable increases and decreases.

Section 204.560 Potential to Emit

“Potential to emit” means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable or legally and practicably enforceable by a governmental entity. Secondary emissions do not count in determining the potential to emit of a stationary source.

Section 204.570 Prevention of Significant Deterioration (PSD) Permit

“Prevention of Significant Deterioration (PSD) Permit” means *a permit or the portion of a permit for a new major source or major modification that is issued by the Illinois EPA under the construction permit program pursuant to Section 9.1(c) of the Act that has been approved by the USEPA and incorporated into the Illinois SIP to implement the requirements of Section 165 of the CAA and 40 CFR 51.166.*

Section 204.580 Process Unit

“Process unit” means any collection of structures and/or equipment that processes, assembles, applies, blends, or otherwise uses material inputs to produce or store an intermediate or completed product. A process unit may contain more than one emissions unit.

Section 204.590 Project

“Project” means a physical change in, or change in the method of operation of, an existing major stationary source.

Section 204.600 Projected Actual Emissions

- a) “Projected actual emissions” means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit’s design capacity or its potential to emit that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.
- b) In determining the projected actual emissions under subsection (a) of this Section (before beginning actual construction), the owner or operator of the major stationary source:
 - 1) Shall consider all relevant information, including but not limited to, historical operational data, the company’s own representations, the company’s expected business activity and the company’s highest projections of business activity, the company’s filings with the State or Federal regulatory authorities, and compliance plans under Illinois’ SIP; and
 - 2) Shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions; and
 - 3) Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit’s emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under Section 204.240 and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or
 - 4) In lieu of using the method set out in subsections (b)(1) through (b)(3) of this Section, may elect to use the emissions unit’s potential to emit, in tons per year, as defined under Section 204.560.

Section 204.610 Regulated NSR Pollutant

“Regulated NSR pollutant” means the following:

- a) Any pollutant for which a NAAQS has been promulgated. This includes, but is not limited to, the following:

- 1) PM_{2.5} emissions and PM₁₀ emissions shall include gaseous emissions from a source or activity, which condense to form PM at ambient temperatures. On or after January 1, 2011, such condensable PM shall be accounted for in applicability determinations and in establishing emissions limitations for PM_{2.5} and PM₁₀ in PSD permits. Compliance with emissions limitations for PM_{2.5} and PM₁₀ issued prior to this date shall not be based on condensable PM unless required by the terms and conditions of the permit or the applicable implementation plan. Applicability determinations made prior to this date without accounting for condensable PM shall not be considered in violation of this Part unless the applicable implementation plan required condensable PM to be included.
- 2) Any pollutant identified under this subsection as a constituent or precursor for a pollutant for which a NAAQS has been promulgated. Precursors for purposes of this Part are the following:
 - A) VOM and NO_x are precursors to ozone in all attainment and unclassifiable areas.
 - B) SO₂ is a precursor to PM_{2.5} in all attainment and unclassifiable areas.
 - C) NO_x are presumed to be precursors to PM_{2.5} in all attainment and unclassifiable areas, unless the State demonstrates to the satisfaction of the USEPA or the USEPA demonstrates that emissions of NO_x from sources in a specific area are not a significant contributor to that area's ambient PM_{2.5} concentrations.
 - D) VOM are presumed not to be precursors to PM_{2.5} in any attainment or unclassifiable area, unless the State demonstrates to the satisfaction of the USEPA or the USEPA demonstrates that emissions of VOM from sources in a specific area are a significant contributor to that area's ambient PM_{2.5} concentrations.
- b) Any pollutant that is subject to any standard promulgated under Section 111 of the CAA (42 USC 7401);
- c) Any Class I or II substance subject to a standard promulgated under or established by title VI of the CAA (42 USC 7671, et seq.);
- d) Any pollutant that otherwise is subject to regulation as defined in Section 204.700.
- e) Notwithstanding subsections (a) through (d) of this Section, the term "regulated NSR pollutant" shall not include any or all hazardous air pollutants either listed in Section 112(b)(1) of the CAA (42 USC 7412(b)(1)), or added to the list pursuant

to Section 112(b)(2) or (b)(3) of the CAA (42 USC 7412(b)(2) or (b)(3)) or substances listed pursuant to Section 112(r)(3) of the CAA (42 USC 7412(r)(3)), and which have not been delisted pursuant to Section 112(b)(3) or (r) of the CAA (42 USC 7412 (b)(3) or (r)), unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a pollutant listed under Section 108 of the CAA (42 USC 7408).

Section 204.620 Replacement Unit

“Replacement unit” means an emissions unit for which all the criteria listed in subsections (a) through (d) of this Section are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

- a) The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit.
- b) The emissions unit is identical to or functionally equivalent to the replaced emissions unit.
- c) The replacement does not alter the basic design parameter(s) of the process unit. Basic design parameters of a process unit shall be determined as follows:
 - 1) Except as provided in subsection (c)(3) of this Section, for a process unit at a steam electric generating facility, the owner or operator may select as its basic design parameters either maximum hourly heat input and maximum hourly fuel consumption rate or maximum hourly electric output rate and maximum steam flow rate. When establishing fuel consumption specifications in terms of weight or volume, the minimum fuel quality based on British Thermal Units content shall be used for determining the basic design parameter(s) for a coal-fired electric utility steam generating unit.
 - 2) Except as provided in subsection (c)(3) of this Section, the basic design parameter(s) for any process unit that is not at a steam electric generating facility are maximum rate of fuel or heat input, maximum rate of material input, or maximum rate of product output. Combustion process units will typically use maximum rate of fuel input. For sources having multiple end products and raw materials, the owner or operator should consider the primary product or primary raw material when selecting a basic design parameter.
 - 3) If the owner or operator believes the basic design parameter(s) in subsections (c)(1) and (c)(2) of this Section is not appropriate for a specific industry or type of process unit, the owner or operator may propose to the Illinois EPA an alternative basic design parameter(s) for the

source's process unit(s). If the Illinois EPA approves of the use of an alternative basic design parameter(s), the Illinois EPA shall issue a permit that is legally enforceable that records such basic design parameter(s) and requires the owner or operator to comply with such parameter(s).

- 4) The owner or operator shall use credible information, such as results of historic maximum capability tests, design information from the manufacturer, or engineering calculations, in establishing the magnitude of the basic design parameter(s) specified in subsections (c)(2) and (c)(3) of this Section.
 - 5) If design information is not available for a process unit, then the owner or operator shall determine the process unit's basic design parameter(s) using the maximum value achieved by the process unit in the five-year period immediately preceding the planned activity.
 - 6) Efficiency of a process unit is not a basic design parameter.
- d) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

Section 204.630 Repowering

- a) "Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the USEPA, in consultation with the US Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.
- b) Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the US Department of Energy.
- c) The Illinois EPA shall give expedited consideration to permit applications for any source that satisfies the requirements of this Section and is granted an extension under Section 409 of the CAA (42 USC 7651h).

Section 204.640 Reviewing Authority

“Reviewing authority” means the Illinois EPA or, in the case of a permit program under 40 CFR 52.21, the USEPA or its delegate, the Illinois EPA.

Section 204.650 Secondary Emissions

“Secondary emissions” means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel. For the purposes of this Part, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the major stationary source or major modification which causes the secondary emissions.

Section 204.660 Significant

- a) “Significant” means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate	
Carbon monoxide	100 tpy
NO _x	40 tpy
SO ₂	40 tpy
PM	25 tpy of particulate matter emissions
PM ₁₀	15 tpy
PM _{2.5}	10 tpy of direct PM _{2.5} emissions; 40 tpy of SO ₂ emissions; 40 tpy of NO _x emissions unless demonstrated not to be a PM _{2.5} precursor under Section 204.610(a)(2)(C)
Ozone	40 tpy of VOM or NO _x
Lead	0.6 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H ₂ S)	10 tpy
Total reduced sulfur (including H ₂ S):	10 tpy
Reduced sulfur compounds (including H ₂ S):	10 tpy
GHGs	<u>75,000 tpy CO₂e</u>
Municipal waste combustor organics	3.2×10^{-6} megagrams per year (3.5×10^{-6} tpy)

(measured as total tetra-through octa-chlorinated dibenzo- <i>p</i> -dioxins and dibenzofurans):	
Municipal waste combustor metals (measured as PM):	14 megagrams per year (15 tpy)
Municipal waste combustor acid gases (measured as SO ₂ and hydrogen chloride):	36 megagrams per year (40 tpy)
Municipal solid waste landfills emissions (measured as nonmethane organic compounds):	45 megagrams per year (50 tpy)
Ozone depleting substances:	100 tpy

- b) “Significant” means, in reference to a net emissions increase or the potential of a source to emit a regulated NSR pollutant that subsection (a) of this Section, does not list, any emissions rate.
- c) Notwithstanding subsection (a) of this Section, “significant” means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than 1 µg/m³ (24-hr average).

Section 204.670 Significant Emissions Increase

“Significant emissions increase” means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in Section 204.660) for that pollutant.

Section 204.680 Stack in Existence

“Stack in existence” means that the owner or operator had (1) begun, or caused to begin, a continuous program of physical on-site construction of the stack or (2) entered into binding agreements or contractual obligations, which could not be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack to be completed within a reasonable time.

Section 204.690 Stationary Source

“Stationary source” means any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant. Emissions resulting directly from an internal combustion engine

for transportation purposes or from a nonroad engine or nonroad vehicle as defined in Section 216 of the CAA (42 USC 7550) are not a part of a stationary source.

Section 204.700 Subject to Regulation

“Subject to regulation” means, for any air pollutant, that the pollutant is subject to either a provision in the CAA, or a nationally-applicable regulation codified by the USEPA in 40 CFR Parts 50 through 99, that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity. Pollutants subject to regulation include, but are not limited to, GHGs as defined in Section 204.430.

Section 204.710 Temporary Clean Coal Technology Demonstration Project

“Temporary clean coal technology demonstration project” means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the Illinois’ SIP and other requirements necessary to attain and maintain the NAAQS during the project and after it is terminated.

SUBPART C: MAJOR STATIONARY SOURCES IN ATTAINMENT AND UNCLASSIFIABLE AREAS

Section 204.800 Applicability

- a) The requirements of this Part apply to the construction of any new major stationary source (as defined in Section 204.510) or any project at an existing major stationary source in an area designated as attainment or unclassifiable under Sections 107(d)(1)(A)(ii) or (iii) of the CAA (42 USC 7407(d)(1)(A)(ii) or (iii)).
- b) The requirements of Sections 204.810, 204.820, 204.830, 204.840, 204.850, 204.1100, 204.1110, 204.1120, 204.1130, 204.1140, and 204.1200 apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this Part otherwise provides.
- c) No new major stationary source or major modification to which the requirements of Sections 204.810, 204.820, 204.830, 204.840, 204.850, 204.1100, 204.1110, 204.1120, 204.1130, 204.1140, and 204.1200 apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements. The Illinois EPA has authority to issue any such permit.
- d) The requirements of the program will be applied in accordance with the principles set out in subsections (d)(1) through (d)(5) of this Section.
 - 1) Except as otherwise provided in subsection (e) of this Section, and consistent with the definition of major modification contained in Section

204.490, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases a significant emissions increase (as defined in Section 204.670), and a significant net emissions increase (as defined in Sections 204.550 and 204.660). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.

- 2) The procedure for calculating (before beginning actual construction) whether a significant emissions increase (i.e., the first step of the process) will occur depends upon the type(s) of emissions units involved in the project, according to subsections (d)(3) through (d)(5) of this Section. The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (i.e., the second step of the process) is contained in the definition in Section 204.550. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.
 - 3) Actual-to-projected-actual applicability test for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in Section 204.600) and the baseline actual emissions (as defined in Section 204.240(a) and (b)), for each existing emissions unit, equals or exceeds the significant amount for that pollutant (as defined in Section 204.660).
 - 4) Actual-to-potential test for projects that only involve construction of a new emissions unit(s). A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in Section 204.560) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in Section 204.240(c)) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in Section 204.660).
 - 5) Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in subsections (d)(3) and (d)(4) of this Section as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant (as defined in Section 204.660).
- e) Except as otherwise provided in Section 204.1400(f)(2), the provisions of Section 204.1400 apply with respect to any regulated NSR pollutant emitted from projects

involving existing emissions units at a major stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility, within the meaning of Section 204.1400(f), that a project that is not a part of a major modification may result in a significant emissions increase of such pollutant, and the owner or operator elects to use the method specified in Sections 204.600(b)(1) through (b)(3) for calculating projected actual emissions.

- f) For any major stationary source for a PAL for a regulated NSR pollutant, the major stationary source shall comply with the requirements under Subpart K.

Section 204.810 Source Information

The owner or operator of a proposed major stationary source or major modification shall submit all information necessary to perform any analysis or make any determination required under this Part.

- a) With respect to a source or modification to which Sections 204.810, 204.1100, 204.1120, and 204.1200 apply, such information shall include:
 - 1) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;
 - 2) A detailed schedule for construction of the source or modification; and
 - 3) A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information as necessary to determine that BACT, as applicable, would be applied.
- b) Upon request of the Illinois EPA, the owner or operator shall also provide information on:
 - 1) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and
 - 2) The air quality impacts, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 7, 1977, in the area the source or modification would affect.

Section 204.820 Source Obligation

Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this Part or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this Part who begins

actual construction after the effective date of this Part without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

Section 204.830 Permit Expiration

Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Illinois EPA may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

Section 204.840 Effect of Permits

Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, State, or Federal law.

Section 204.850 Relaxation of a Source-Specific Limitation

At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of Sections 204.810, 204.820, 204.830, 204.840, 204.850, 204.1100, 204.1110, 204.1120, 204.1130, 204.1140, 204.1200, and 204.1400 shall apply to the source or modification as though construction had not yet commenced on the source or modification.

Section 204.860 Exemptions

- a) The requirements of Sections 204.810, 204.820, 204.830, 204.840, 204.850, 204.1100, 204.1110, 204.1120, 204.1130, 204.1140, 204.1200, and 204.1400 shall not apply to a particular major stationary source or major modification, if:
 - 1) The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution and the Governor of Illinois exempts it from those requirements; or
 - 2) The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:

- A) Coal cleaning plants (with thermal dryers);
- B) Kraft pulp mills;
- C) Portland cement plants;
- D) Primary zinc smelters;
- E) Iron and steel mills;
- F) Primary aluminum ore reduction plants;
- G) Primary copper smelters;
- H) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- I) Hydrofluoric, sulfuric, or nitric acid plants;
- J) Petroleum refineries;
- K) Lime plants;
- L) Phosphate rock processing plants;
- M) Coke oven batteries;
- N) Sulfur recovery plants;
- O) Carbon black plants (furnace process);
- P) Primary lead smelters;
- Q) Fuel conversion plants;
- R) Sintering plants;
- S) Secondary metal production plants;
- T) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;
- U) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;

- V) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
 - W) Taconite ore processing plants;
 - X) Glass fiber processing plants;
 - Y) Charcoal production plants;
 - Z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;
 - AA) Any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the CAA (42 USC 7411 or 7412); or
- 3) The source is a portable stationary source which has previously received a permit under 40 CFR 52.21 or this Part, and
- A) The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary;
 - B) The emissions from the source would not exceed its allowable emissions;
 - C) The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and
 - D) Reasonable notice is given to the Illinois EPA prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the Illinois EPA not less than 10 days in advance of the proposed relocation unless a different time duration is previously approved by the Illinois EPA.
- b) The requirements of Sections 204.810, 204.820, 204.830, 204.840, 204.850, 204.1100, 204.1110, 204.1120, 204.1130, 204.1140, 204.1200, and 204.1400 shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment under Section 107 of the CAA (42 USC 7407). Nonattainment designations for revoked NAAQS, as contained in 40 CFR Part 81, shall not be viewed as current designations under Section 107 of the CAA (42 USC 7407) for purposes of determining the applicability of Sections 204.810, 204.820, 204.830, 204.840, 204.850, 204.1100, 204.1110, 204.1120, 204.1130, 204.1140, 204.1200,

and 204.1400 to a major stationary source or major modification after the revocation of that NAAQS is effective.

- c) The requirements of Sections 204.1110, 204.1130, and 204.1140 shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modification:
 - 1) Would impact no Class I area and no area where an applicable increment is known to be violated, and
 - 2) Would be temporary.
- d) The requirements of Sections 204.1110, 204.1130, and 204.1140 as they relate to any maximum allowable increase for a Class II area shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of BACT would be less than 50 tpy.

SUBPART D: INCREMENT

Section 204.900 Ambient Air Increments

In areas designated as Class I, II or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
Class I Area	
PM _{2.5} :	
Annual arithmetic mean	1
24-hr maximum	2
PM ₁₀ :	
Annual arithmetic mean	4
24-hr maximum	8
SO ₂ :	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25
NO ₂ :	
Annual arithmetic mean	2.5
Class II Area	
PM _{2.5} :	
Annual arithmetic mean	4

24-hr maximum	9
PM ₁₀ :	
Annual arithmetic mean	17
24-hr maximum	30
SO ₂ :	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	512
NO ₂ :	
Annual arithmetic mean	25
Class III Area	
PM _{2.5} :	
Annual arithmetic mean	8
24-hr maximum	18
PM ₁₀ :	
Annual arithmetic mean	34
24-hr maximum	60
SO ₂ :	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum	700
NO ₂ :	
Annual arithmetic mean	50

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

Section 204.910 Ambient Air Ceilings

No concentration of a pollutant shall exceed:

- a) The concentration permitted under the national secondary ambient air quality standard, or
- b) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

Section 204.920 Restrictions on Area Classifications

- a) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:
 - 1) International parks,

- 2) National wilderness areas which exceed 5,000 acres in size,
 - 3) National memorial parks which exceed 5,000 acres in size, and
 - 4) National parks which exceed 6,000 acres in size.
- b) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this Part.
- c) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this Part.
- d) The following areas may be redesignated only as Class I or II:
- 1) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and
 - 2) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

Section 204.930 Redesignation

- a) As of the initial effective date of 35 Ill. Adm. Code 204, all areas of the State (except as otherwise provided under Section 204.920) are designated Class II as of December 5, 1974. Redesignation (except as otherwise precluded by Section 204.920) may be proposed by the State or Indian Governing Bodies, as provided below, subject to approval by the USEPA as a revision to the applicable SIP.
- b) The State may submit to the USEPA a proposal to redesignate areas of the State Class I or Class II provided that:
- 1) At least one public hearing has been held in accordance with procedures established in 35 Ill. Adm. Code Part 252;
 - 2) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;
 - 3) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social, and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to

the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;

- 4) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the State has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity (not in excess of 60 days) to confer with the State respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the State shall have published a list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and
 - 5) The State has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.
- c) Any area other than an area to which Section 204.920 refers may be redesignated as Class III if—
- 1) The redesignation would meet the requirements of subsection (b) of this Section;
 - 2) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor of Illinois, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless State law provides that the redesignation must be specifically approved by State legislation) and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation;
 - 3) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any NAAQS; and
 - 4) Any permit application for any major stationary source or major modification, subject to review under Section 204.1120 which could receive a permit under this Section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available, insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.

- d) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the USEPA a proposal to redesignate areas Class I, Class II, or Class III, provided, that:
 - 1) The Indian Governing Body has followed procedures equivalent to those required of a State under subsections (b), (c)(3), and (c)(4) of this Section; and
 - 2) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located and which border the Indian Reservation.
- e) The USEPA shall disapprove, within 90 days of submission, a proposed redesignation of any area only if it finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this Section or is inconsistent with Section 204.920. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.
- f) If the USEPA disapproves any proposed redesignation, the State or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the USEPA.

SUBPART E: STACK HEIGHTS

Section 204.1000 Stack Heights

- a) The degree of emission limitation required for control of any air pollutant under this Part shall not be affected in any manner by:
 - 1) So much of the stack height of any source as exceeds good engineering practice, or
 - 2) Any other dispersion technique.
- b) Subsection (a) of this Section shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before then.

SUBPART F: REQUIREMENTS FOR MAJOR STATIONARY SOURCES AND MAJOR MODIFICATIONS IN ATTAINMENT AND UNCLASSIFIABLE AREAS

Section 204.1100 Control Technology Review

- a) A major stationary source or major modification shall meet each applicable emissions limitation under the SIP and each applicable emissions standard and standard of performance under 40 CFR Parts 60,61, 62 and 63
- b) A new major stationary source shall apply BACT for each regulated NSR pollutant that it would have the potential to emit in significant amounts.
- c) A major modification shall apply BACT for each regulated NSR pollutant for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.
- d) For phased construction projects, the determination of BACT shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of BACT for the source.

Section 204.1110 Source Impact Analysis

The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of:

- a) Any NAAQS in any air quality control region; or
- b) Any applicable maximum allowable increase over the baseline concentration in any area.

Section 204.1120 Air Quality Models

- a) All estimates of ambient concentrations required under this Section shall be based on applicable air quality models, databases, and other requirements specified in Appendix W of 40 CFR Part 51 (Guideline on Air Quality Models).
- b) Where an air quality model specified in Appendix W of 40 CFR Part 51 (Guideline on Air Quality Models) is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis for a specific state program. Written approval of the USEPA must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment under procedures set forth in 35 Ill. Adm. Code Part 252.

Section 204.1130 Air Quality Analysis

- a) Preapplication analysis.
 - 1) Any application for a permit under this Part shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:
 - A) For the source, each pollutant that it would have the potential to emit in a significant amount;
 - B) For the modification, each pollutant for which it would result in a significant net emissions increase.
 - 2) With respect to any such pollutant for which no NAAQS exists, the analysis shall contain such air quality monitoring data as the Illinois EPA determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.
 - 3) With respect to any such pollutant for which such a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.
 - 4) In general, the continuous air quality monitoring data that is required shall have been gathered over a period of at least one year and shall represent at least the year preceding receipt of the application, except that, if the Illinois EPA determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not to be less than four months), the data that is required shall have been gathered over at least that shorter period.
 - 5) The owner or operator of a proposed stationary source or modification of VOM who satisfies all conditions of 40 CFR Part 51 Appendix S, Section IV may provide post-approval monitoring data for ozone in lieu of providing preconstruction data as required under this subsection.
- b) Post-construction monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the Illinois EPA determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.

- c) Operations of monitoring stations. The owner or operator of a major stationary source or major modification shall meet the requirements of Appendix B to 40 CFR Part 58 during the operation of monitoring stations for purposes of satisfying this Section.

Section 204.1140 Additional Impact Analyses

- a) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.
- b) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

SUBPART G: ADDITIONAL REQUIREMENTS FOR CLASS I AREAS

Section 204.1200 Additional Requirements for Sources Impacting Federal Class I Areas

- a) Notice to Federal Land Managers. The Illinois EPA shall provide written notice of any permit application for a proposed major stationary source or major modification, the emissions from which may affect a Class I area, to the Federal Land Manager and the Federal official charged with direct responsibility for management of any lands within any such area. Such notification shall include a copy of all information relevant to the permit application and shall be given within 30 days of receipt and at least 60 days prior to any public hearing on the application for a permit to construct. Such notification shall include an analysis of the proposed source's anticipated impacts on visibility in the Federal Class I area. The Illinois EPA shall also provide the Federal Land Manager and such Federal officials with a copy of the preliminary determination required under 35 Ill. Adm. Code Part 252, and shall make available to them any materials used in making that determination, promptly after the Illinois EPA makes such determination. Finally, the Illinois EPA shall also notify all affected Federal Land Managers within 30 days of receipt of any advance notification of any such permit application.
- b) Federal Land Manager. The Federal Land Manager and the Federal official charged with direct responsibility for management of such lands have an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the Illinois EPA, whether a proposed source or modification will have an adverse impact on such values.

- c) **Visibility analysis.** The Illinois EPA shall consider any analysis performed by the Federal Land Manager, provided within 30 days of the notification required by subsection (a) of this Section, that shows that a proposed new major stationary source or major modification may have an adverse impact on visibility in any Federal Class I area. Where the Illinois EPA finds that such an analysis does not demonstrate to the satisfaction of the Illinois EPA that an adverse impact on visibility will result in the Federal Class I area, the Illinois EPA must, in the notice of public hearing on the permit application, either explain its decision or give notice as to where the explanation can be obtained.
- d) **Denial—impact on air quality related values.** The Federal Land Manager of any such lands may demonstrate to the Illinois EPA that the emissions from a proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Illinois EPA concurs with such demonstration, then it shall not issue the permit.
- e) **Class I variances.** The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source or modification would have no adverse impact on the air quality related values of any such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal Land Manager concurs with such demonstration and he so certifies, the Illinois EPA may, provided that the applicable requirements of this Part are otherwise met, issue the permit with such emission limitations as may be necessary to assure that emissions of SO₂, PM_{2.5}, PM₁₀, and NO_x would not exceed the following maximum allowable increases over minor source baseline concentration for such pollutants:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
PM _{2.5} :	
Annual arithmetic mean	4
24-hr maximum	9
PM ₁₀ :	
Annual arithmetic mean	17
24-hr maximum	30
SO ₂ :	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	325
NO ₂ :	
Annual arithmetic mean	25

- f) Sulfur dioxide variance by Governor with Federal Land Manager's concurrence. The owner or operator of a proposed source or modification which cannot be approved under subsection (e) of this Section may demonstrate to the Governor that the source cannot be constructed by reason of any maximum allowable increase for SO₂ for a period of 24 hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may, after notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the Illinois EPA shall issue a permit to such source or modification pursuant to the requirements of subsection (h) of this Section, provided that the applicable requirements of this Part are otherwise met.
- g) Variance by the Governor with the President's concurrence. In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager shall be transmitted to the President. The President may approve the Governor's recommendation if he finds that the variance is in the national interest. If the variance is approved, the Illinois EPA shall issue a permit pursuant to the requirements of subsection (h) of this Section, provided that the applicable requirements of this Part are otherwise met.
- h) Emission limitations for Presidential or gubernatorial variance. In the case of a permit issued pursuant to subsections (f) or (g) of this Section the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of SO₂ from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period:

MAXIMUM ALLOWABLE INCREASE [Micrograms per cubic meter]		
Period of exposure		
	Low Terrain	High Terrain
24-hr maximum	36	62
3-hr maximum	130	221

SUBPART H: GENERAL OBLIGATIONS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Section 204.1300 Notification of Application Completeness to Applicants

The Illinois EPA shall notify the applicant within 30 days of receipt as to the completeness of an application for a permit pursuant to this Part or any deficiency in the application or information submitted in such an application. In the event of such a deficiency, the date of receipt of the application shall be the date on which the Illinois EPA received all required information.

Section 204.1310 Transmittal of Application to USEPA

The Illinois EPA shall transmit to the USEPA a copy of each permit application submitted pursuant to this Part relating to a major stationary source or a major modification.

Section 204.1320 Public Participation

Prior to the initial issuance of a permit pursuant to this Part or a modification of a permit issued pursuant to this Part, the Illinois EPA shall provide, at a minimum, notice of the proposed issuance or modification of a permit, a comment period, and opportunity for public hearing pursuant to the Illinois EPA's public participation procedures set forth at 35 Ill. Adm. Code Part 252.

Section 204.1330 Issuance Within One Year of Submittal of Complete Application

Within one year after receipt of a complete application, a permit shall be granted or denied by the Illinois EPA.

Section 204.1340 Permit Rescission

- a) Any permit issued under this Part or a prior version of this Part shall remain in effect, unless and until it expires under Section 204.830 or is rescinded under this Section.
- b) An owner or operator of a stationary source or modification who holds a permit issued under this Part or 40 CFR 52.21 for the construction of a new source or modification that meets the requirement in subsection (c) may request that the Illinois EPA rescind the permit or a particular portion of the permit.
- c) The Illinois EPA may grant an application for rescission if the application shows that this Part would not apply to the source or modification.
- d) If the Illinois EPA rescinds a permit under this Section, the Illinois EPA shall post a notice of the rescission determination on a public web site identified by the Illinois EPA within 60 days of the rescission.

SUBPART I: NONAPPLICABILITY RECORDKEEPING AND REPORTING

Section 204.1400 Recordkeeping and Reporting Requirements for Certain Projects at Major Stationary Sources

Except as otherwise provided in subsection (f)(2) of this Section, the provisions of this Section apply with respect to any regulated NSR pollutant emitted from projects involving existing emissions unit(s) at a major stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility, within the meaning of subsection (f) of this Section, that a project that is not a major modification for the pollutant may result in a significant emissions increase of such pollutant, and the owner or operator elects to use the method specified in Sections 204.600(b)(1) through (b)(3) for calculating projected actual emissions.

- a) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:
 - 1) A description of the project;
 - 2) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and
 - 3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under Section 204.600(b)(3) and an explanation for why such amount was excluded, and any netting calculations, if applicable.
- b) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in subsection (a) of this Section to the Illinois EPA. Nothing in this subsection shall be construed to require the owner or operator of such a unit to obtain any determination from the Illinois EPA before beginning actual construction.
- c) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in subsection (a)(2) of this Section; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit that regulated NSR pollutant at such emissions unit.
- d) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the Illinois EPA within 60 days after the end of each year during which records must be generated under subsection (c) of this

Section setting out the unit's annual emissions during the calendar year that preceded submission of the report.

- e) If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the Illinois EPA if the annual emissions, in tons per year, from the project identified in subsection (a) of this Section, exceed the baseline actual emissions (as documented and maintained pursuant to subsection (a)(3) of this Section), by a significant amount (as defined in Section 204.660) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to subsection (a)(3) of this Section. Such report shall be submitted to the Illinois EPA within 60 days after the end of such year. The report shall contain the following:
 - 1) The name, address and telephone number of the major stationary source;
 - 2) The annual emissions as calculated pursuant to subsection (c) of this Section; and
 - 3) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).
- f) A "reasonable possibility" under this Section occurs when the owner or operator calculates the project to result in either:
 - 1) A projected actual emissions increase of at least 50 percent of the amount that is a "significant emissions increase," as defined in Section 204.670 (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant; or
 - 2) A projected actual emissions increase that, added to the amount of emissions excluded under Section 204.600(b)(3), sums to at least 50 percent of the amount that is a "significant emissions increase," as defined under Section 204.670 (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant. For a project for which a reasonable possibility occurs only within the meaning of this subsection (f)(2), and not also within the meaning of subsection (f)(1) of this Section, then subsections (b) through (e) of this Section do not apply to the project.
- g) The owner or operator of the source shall make the information required to be documented and maintained pursuant to this Section available for review upon a request for inspection by the Illinois EPA or USEPA or the general public pursuant to the requirements contained in Section 39.5(8)(e) of the Act.

SUBPART J: INNOVATIVE CONTROL TECHNOLOGY**Section 204.1500 Innovative Control Technology**

- a) An owner or operator of a proposed major stationary source or major modification may request the Illinois EPA in writing no later than the close of the comment period under 35 Ill. Adm. Code Part 252 to approve a system of innovative control technology.
- b) The Illinois EPA shall, with the consent of the Governor, determine that the source or modification may employ a system of innovative control technology, if:
 - 1) The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;
 - 2) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under Section 204.1100(b), by a date specified by the Illinois EPA. Such date shall not be later than 4 years from the time of startup or 7 years from permit issuance;
 - 3) The source or modification would meet the requirements of Sections 204.1100 and 204.1110, based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified by the Illinois EPA;
 - 4) The source or modification would not before the date specified by the Illinois EPA:
 - A) Cause or contribute to a violation of an applicable NAAQS; or
 - B) Impact any area where an applicable increment is known to be violated; and
 - 5) All other applicable requirements including those for public participation have been met.
 - 6) The provisions of Section 204.1200(relating to Class I areas) have been satisfied with respect to all periods during the life of the source or modification.
- c) The Illinois EPA shall withdraw any approval to employ a system of innovative control technology made under this Section, if:

- 1) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate; or
 - 2) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or
 - 3) The Illinois EPA decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.
- d) If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with subsection (c) of this Section, the Illinois EPA may allow the source or modification up to an additional 3 years to meet the requirement for the application of BACT through use of a demonstrated system of control.

SUBPART K: PLANTWIDE APPLICABILITY LIMITATION

Section 204.1600 Applicability

- a) The Illinois EPA may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements in this Subpart. The term "PAL" shall mean "actuals PAL" throughout this Subpart.
- b) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in this Subpart, and complies with the PAL permit:
 - 1) Is not a major modification for the PAL pollutant;
 - 2) Does not have to be approved through the major NSR program; and
 - 3) Is not subject to the provisions in Section 204.850 (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program).
- c) Except as provided under subsection (b)(2) of this Section, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

Section 204.1610 Definitions

For the purposes of this Subpart, the definitions in Sections 204.1620 through 204.1780 apply. When a term is not defined in these sections, it shall have the meaning given in this Part, Part 211, or in the CAA.

Section 204.1620 Actuals PAL

“Actuals PAL” for a major stationary source means a PAL based on the baseline actual emissions (as defined in Section 204.240) of all emissions units (as defined in Section 204.370) at the source, that emit or have the potential to emit the PAL pollutant.

Section 204.1630 Allowable Emissions

“Allowable emissions” means “allowable emissions” as defined in Section 204.230, except that the allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit’s potential to emit.

Section 204.1640 Continuous Emissions Monitoring System (CEMS)

“Continuous emissions monitoring system” or “CEMS” means all of the equipment that may be required to meet the data acquisition and availability requirements of this Part, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

Section 204.1650 Continuous Emissions Rate Monitoring System (CERMS)

“Continuous emissions rate monitoring system” or “CERMS” means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

Section 204.1660 Continuous Parameter Monitoring System (CPMS)

“Continuous parameter monitoring system” or “CPMS” means all of the equipment necessary to meet the data acquisition and availability requirements of this Part to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and to record average operational parameter value(s) on a continuous basis.

Section 204.1670 Lowest Achievable Emission Rate (LAER)

“Lowest achievable emission rate” or “LAER” shall have the meaning given by the provisions at 35 Ill. Adm. Code 203.301(a).

Section 204.1680 Major Emissions Unit

“Major emissions unit” means any emissions unit that emits or has the potential to emit 100 tpy or more of the PAL pollutant in an attainment area.

Section 204.1690 Plantwide Applicability Limitation (PAL)

Plantwide applicability limitation” or (“PAL” means an emission limitation expressed on a mass basis in tons per year, or expressed in tons per year CO₂e for a GHG emission limitation for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with this Subpart.

Section 204.1700 PAL Effective Date

“PAL effective date” generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

Section 204.1710 PAL Effective Period

“PAL effective period” means the period beginning with the PAL effective date and ending 10 years later.

Section 204.1720 PAL Major Modification

“PAL major modification” means, notwithstanding Sections 204.490 and 204.550 (the definitions for major modification, and net emissions increase), any physical change in or change in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

Section 204.1730 PAL Permit

“PAL permit” means the major NSR permit, the minor NSR permit, or the State operating permit under a program that is approved into the SIP, or the CAAPP permit issued by the Illinois EPA that establishes a PAL for a major stationary source.

Section 204.1740 PAL Pollutant

“PAL pollutant” means the pollutant for which a PAL is established at a major stationary source.

Section 204.1750 Predictive Emissions Monitoring System (PEMS)

“Predictive emissions monitoring system” or “PEMS” means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.

Section 204.1760 Reasonably Achievable Control Technology (RACT)

“Reasonably Achievable Control Technology” or “RACT” means devices, systems, process modifications, or other apparatus or techniques that are reasonably available taking into account:

- a) The necessity of imposing such controls in order to attain and maintain a national ambient air quality standard;
- b) The social, environmental, and economic impact of such controls; and
- c) Alternative means of providing for attainment and maintenance of such standard.

Section 204.1770 Significant Emissions Unit

“Significant emissions unit” means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level (as defined in Section 204.660 or in the CAA, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in Section 204.1680.

Section 204.1780 Small Emissions Unit

“Small emissions unit” means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in Section 204.660 or in the CAA, whichever is lower.

Section 204.1790 Permit Application Requirements

As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the Illinois EPA for approval:

- a) A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, Federal or State applicable requirements, emission limitations, or work practices apply to each unit.
- b) Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.
- c) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by Section 204.1890(a).

Section 204.1800 General Requirements for Establishing PAL

- a) The Illinois EPA is allowed to establish a PAL at a major stationary source, provided that at a minimum, the requirements in this Section are met.

- 1) The PAL shall impose an annual emission limitation expressed on a mass basis in tons per year, or expressed in tons per year CO₂e for a GHG PAL, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.
 - 2) The PAL shall be established in a PAL permit that meets the public participation requirements in Section 204.1810.
 - 3) The PAL permit shall contain all the requirements of Section 204.1830.
 - 4) The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.
 - 5) Each PAL shall regulate emissions of only one pollutant.
 - 6) Each PAL shall have a PAL effective period of 10 years.
 - 7) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in Sections 204.1880 through 204.1900 for each emissions unit under the PAL through the PAL effective period.
- b) At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets pursuant to 35 Ill. Adm. Code Part 203 unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

Section 204.1810 Public Participation Requirements

PALs for existing major stationary sources shall be established, renewed, or increased through a procedure that is consistent with 35 Ill. Adm. Code Part 252. This includes the requirement that the Illinois EPA provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comment. The Illinois EPA must address all material comments before taking final action on the permit.

Section 204.1820 Setting the 10-Year Actuals PAL Level

- a) Except as provided in subsection (b) of this Section, the plan shall provide that the actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions (as defined in Section 204.240) of the PAL pollutant for each emissions unit at the source, plus an amount equal to the applicable significant level for the PAL pollutant under Section 204.660 or under the CAA, whichever is lower. When establishing the actuals PAL level, for a PAL pollutant, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive 24-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shut down after this 24-month period must be subtracted from the PAL level. The Illinois EPA shall specify a reduced PAL level(s) in tons per year (or tons per year CO₂e for a GHG PAL) in the PAL permit to become effective on the future compliance date(s) of any applicable Federal or State regulatory requirement(s) that the Illinois EPA is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO_x to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s).
- b) For newly constructed units (which do not include modifications to existing units) on which actual construction began after the 24-month period, in lieu of adding the baseline actual emissions as specified in subsection (a) of this Section, the emissions must be added to the PAL level in an amount equal to the potential to emit of the units.

Section 204.1830 Contents of the PAL Permit

- a) The PAL permit must contain, at a minimum, the information in subsections (a)(1) through (10) of this Section.
- 1) The PAL pollutant and the applicable source-wide emission limitation in tons per year, or tons per year CO₂e for a GHG PAL.
 - 2) The PAL permit effective date and the expiration date of the PAL (PAL effective period).
 - 3) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with Section 204.1860 before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the Illinois EPA.
 - 4) A requirement that emission calculations for compliance purposes must include emissions from startups, shutdowns, and malfunctions.

- 5) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of Section 204.1850.
- 6) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by Section 204.1890(a).
- 7) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under Section 204.1880.
- 8) A requirement to retain the records required under Section 204.1890 on site. Such records may be retained in an electronic format.
- 9) A requirement to submit the reports required under Section 204.1900 by the required deadlines.
- 10) Any other requirements that the Illinois EPA deems necessary to implement and enforce the PAL.

Section 204.1840 Effective Period and Reopening a PAL Permit

The requirements in subsections (a) and (b) of this Section apply to actuals PALs.

- a) PAL effective period. The Illinois EPA shall specify a PAL effective period of 10 years.
- b) Reopening of the PAL permit.
 - 1) During the PAL effective period, the Illinois EPA must reopen the PAL permit to:
 - B) Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;
 - C) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets pursuant to 35 Ill. Adm. Code Part 203; and
 - D) Revise the PAL to reflect an increase in the PAL as provided under Section 204.1870.

- 2) The Illinois EPA shall have discretion to reopen the PAL permit for the following:
 - A) Reduce the PAL to reflect newly applicable Federal requirements (for example, NSPS) with compliance dates after the PAL effective date;
 - B) Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the Illinois EPA may impose on the major stationary source under the SIP; and
 - C) Reduce the PAL if the Illinois EPA determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an air quality related value that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.
- c) Except for the permit reopening in subsection (b)(1)(A) of this Section for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of Section 204.1810.

Section 204.1850 Expiration of a PAL

Any PAL that is not renewed in accordance with the procedures in Section 204.1860 shall expire at the end of the PAL effective period, and the requirements in this Section shall apply.

- a) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in subsections (a)(1) and (2) of this Section.
 - 1) Within the time frame specified for PAL renewals in Section 204.1860(b), the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the Illinois EPA) by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under Section 204.1860(e), such distribution shall be made as if the PAL had been adjusted.
 - 2) The Illinois EPA shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating

allowable limits for each emissions unit, or each group of emissions units, as the Illinois EPA determines is appropriate.

- b) Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The Illinois EPA may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, PEMS, or CPMS to demonstrate compliance with the allowable emission limitation.
- c) Until the Illinois EPA issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under subsection (a)(2) of this Section, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.
- d) Any physical change or change in the method of operation at the major stationary source will be subject to major NSR requirements if such change meets the definition of major modification in Section 204.490.
- e) The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, etc.) that may have applied either during the PAL effective period or prior to the PAL effective period except for those emission limitations that had been established pursuant to Section 204.850, but were eliminated by the PAL in accordance with the provisions in Section 204.1600(b)(3).

Section 204.1860 Renewal of a PAL

- a) The Illinois EPA shall follow the procedures specified in Section 204.1810 in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the Illinois EPA.
- b) **Application deadline.** A major stationary source owner or operator shall submit a timely application to the Illinois EPA to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.
- c) **Application requirements.** The application to renew a PAL permit shall contain the information required in subsections (c)(1) through (4) of this Section.

- 1) The information required in Section 204.1790(a) through (c).
 - 2) A proposed PAL level.
 - 3) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).
 - 4) Any other information the owner or operator wishes the Illinois EPA to consider in determining the appropriate level for renewing the PAL.
- d) PAL adjustment. In determining whether and how to adjust the PAL, the Illinois EPA shall consider the options outlined in subsections (d)(1) and (2) of this Section. However, in no case may any such adjustment fail to comply with subsection (d)(3) of this Section.
- 1) If the emissions level calculated in accordance with Section 204.1820 is equal to or greater than 80 percent of the PAL level, the Illinois EPA may renew the PAL at the same level without considering the factors set forth in subsection (d)(2) of this Section; or
 - 2) The Illinois EPA may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the Illinois EPA in its written rationale.
 - 3) Notwithstanding subsections (d)(1) and (2) of this Section:
 - A) If the potential to emit of the major stationary source is less than the PAL, the Illinois EPA shall adjust the PAL to a level no greater than the potential to emit of the source; and
 - B) The Illinois EPA shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of Section 204.1870 (increasing a PAL).
- e) If the compliance date for a State or Federal requirement that applies to the PAL source occurs during the PAL effective period, and if the Illinois EPA has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or CAAPP permit renewal, whichever occurs first.

Section 204.1870 Increasing the PAL During the PAL Effective Period

- a) The Illinois EPA may increase a PAL emission limitation only if the major stationary source complies with the provisions in subsections (a)(1) through (4) of this Section.
- 1) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.
 - 2) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions unit(s) exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.
 - 3) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in subsection (a)(1) of this Section, regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.
 - 4) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
- b) The Illinois EPA shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT equivalent controls as determined in accordance with subsection (a)(2)), plus the sum of the baseline actual emissions of the small emissions units.
- c) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of Section 204.1810.

Section 204.1880 Monitoring Requirements

- a) General requirements.
 - 1) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time, or in CO₂e per unit of time for a GHG PAL. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.
 - 2) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in subsection (b)(1) through (4) of this Section and must be approved by the Illinois EPA.
 - 3) Notwithstanding subsection (a)(2) of this Section, the owner or operator may also employ an alternative monitoring approach that meets subsection (a)(1) of this Section if approved by the Illinois EPA.
 - 4) Failure to use a monitoring system that meets the requirements of this Section renders the PAL invalid.
- b) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in subsections (c) through (i) of this Section:
 - 1) Mass balance calculations for activities using coatings or solvents;
 - 2) CEMS;
 - 3) CPMS or PEMS; and
 - 4) Emission factors.
- c) Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:
 - 1) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;

- 2) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and
 - 3) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the Illinois EPA determines there is site-specific data or a site-specific monitoring program to support another content within the range.
- d) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:
- 1) CEMS must comply with applicable Performance Specifications found in 40 CFR Part 60, Appendix B; and
 - 2) CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.
- e) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:
- 1) The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and
 - 2) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the Illinois EPA, while the emissions unit is operating.
- f) Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:
- 1) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;
 - 2) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and
 - 3) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor

within 6 months of PAL permit issuance, unless the Illinois EPA determines that testing is not required.

- g) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.
- h) Notwithstanding the requirements in subsections (c) through (g) of this Subpart, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the Illinois EPA shall, at the time of permit issuance:
 - 1) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or
 - 2) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.
- i) Re-validation. All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the Illinois EPA. Such testing must occur at least once every 5 years after issuance of the PAL.

Section 204.1890 Recordkeeping Requirements

- a) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of this Subpart and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.
- b) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus 5 years:
 - 1) A copy of the PAL permit application and any applications for revisions to the PAL; and
 - 2) Each annual certification of compliance pursuant to Section 39.5(7)(p)(v) of the Act and the data relied on in certifying the compliance.

Section 204.1900 Reporting and Notification Requirements

The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the Illinois EPA in accordance with the CAAPP. The reports shall meet the requirements in subsections (a) through (c) of this Section.

- a) Semi-annual report. The semi-annual report shall be submitted to the Illinois EPA within 30 days of the end of each reporting period. This report shall contain the information required in subsections (a)(1) through (7) of this Section.
 - 1) The identification of owner and operator and the permit number.
 - 2) Total annual emissions (expressed on a mass-basis in tons per year, or expressed in tons per year CO₂e for a GHG PAL) based on a 12-month rolling total for each month in the reporting period recorded pursuant to Section 204.1890(a).
 - 3) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.
 - 4) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.
 - 5) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
 - 6) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by Section 204.1880(g).
 - 7) A signed statement by the responsible official (as defined by the CAAPP) certifying the truth, accuracy, and completeness of the information provided in the report.
- b) Deviation report. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to 40 CFR 70.6(a)(3)(iii)(B) shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing 40 CFR 70.6(a)(3)(iii)(B). The reports shall contain the following information:

- 1) The identification of owner and operator and the permit number;
 - 2) The PAL requirement that experienced the deviation or that was exceeded;
 - 3) Emissions resulting from the deviation or the exceedance; and
 - 4) A signed statement by the responsible official (as defined by the CAAPP) certifying the truth, accuracy, and completeness of the information provided in the report.
- c) Re-validation results. The owner or operator shall submit to the Illinois EPA the results of any re-validation test or method within 3 months after completion of such test or method.

Section 204.1910 Transition Requirements

- a) The Illinois EPA may not issue a PAL that does not comply with the requirements in this Subpart after the initial effective date of 35 Ill. Adm. Code 204.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE A: GENERAL PROVISIONS
CHAPTER I: POLLUTION CONTROL BOARD

PART 101
GENERAL RULES

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AUTHORITY: Implementing Sections 5, 7.1, 7.2, 26, 27, 28, 29, 31, 32, 33, 35, 36, 37, 38, 40, 40.1, 40.2, 41, and 58.7 of the Environmental Protection Act (Act) [415 ILCS 5/5, 7.1, 7.2, 26, 27, 28, 29, 31, 32, 33, 35, 36, 37, 38, 40, 40.1, 40.2, 41, and 58.7] and authorized by Sections 26 and 27 of the Act [415 ILCS 5/26 and 27] and Section 25-101 of the Electronic Commerce Security Act [5 ILCS 175/25-101].

SOURCE: Filed with Secretary of State January 1, 1978; codified 6 Ill. Reg. 8357; Part repealed, new Part adopted in R88-5A at 13 Ill. Reg. 12055, effective July 10, 1989; amended in R90-24 at 15 Ill. Reg. 18677, effective December 12, 1991; amended in R92-7 at 16 Ill. Reg. 18078, effective November 17, 1992; old Part repealed, new Part adopted in R00-20 at 25 Ill. Reg. 446, effective January 1, 2001; amended in R04-24 at 29 Ill. Reg. 8743, effective June 8, 2005; amended in R06-9 at 29 Ill. Reg. 19666, effective November 21, 2005; amended in R07-17 at 31 Ill. Reg. 16110, effective November 21, 2007; amended in R10-22 at 34 Ill. Reg. 19566, effective December 3, 2010; amended in R12-22 at 36 Ill. Reg. 9211, effective June 7, 2012; amended in R13-9 at 37 Ill. Reg. 1655, effective January 28, 2013; amended in R14-21 at 39 Ill. Reg. 2276, effective January 27, 2015; amended in R15-20 at 39 Ill. Reg. 12848, effective September 8, 2015, amended in R16-17 at 40 Ill. Reg. 7912, effective May 20, 2016; amended in R17-18 at 41 Ill. Reg. 9930, effective July 5, 2017; amended in R - at 42 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 101.100 Applicability

- a) This Part sets forth the rules generally applicable to proceedings before the Illinois Pollution Control Board (Board), and should be read in conjunction with procedural rules for the Board's specific proceedings, found at 35 Ill. Adm. Code 102 through 130, and the Board's Administrative Rules, found at 2 Ill. Adm. Code 2175. In the event of a conflict between the rules of this Part and those found in subsequent Parts, the more specific requirement applies.
- b) Except when the Board's procedural rules provide otherwise, the provisions of the Code of Civil Procedure [735 ILCS 5] and the Supreme Court Rules [Ill. S. Ct. Rules] do not apply to proceedings before the Board. However, the Board may look to the Code of Civil Procedure and the Supreme Court Rules for guidance when the Board's procedural rules are silent.

(Source: Amended at 39 Ill. Reg. 12848, effective September 8, 2015)

Section 101.102 Severability

If any provision of this Part or its application to any person is adjudged invalid, the adjudication does not affect the validity of this Part as a whole or of any portion not adjudged invalid.

Section 101.104 Repeals

All Board resolutions adopted before January 1, 2001 that relate to procedural matters for Board proceedings are repealed and are superseded by 35 Ill. Adm. Code 101-130.

Section 101.106 Board Authority

- a) The Board has the authority to *determine, define and implement the environmental control standards applicable in the State of Illinois and may adopt rules and regulations in accordance with Title VII of the Act.* [415 ILCS 5/5(b)]
- b) The Board has the *authority to conduct proceedings upon complaints charging violations of the Act, any rule or regulation adopted under the Act, any permit or term or condition of a permit, or any Board order; upon administrative citations; upon petitions for variances or adjusted standards; upon petitions for review of the Agency's final determinations on permit applications in accordance with Title X of the Act; upon petitions to remove seals under Section 34 of the Act; upon other petitions for review of final determination which are made pursuant to the Act or Board rules and which involve a subject which the Board is authorized to regulate. The Board may also conduct other proceedings as may be provided by the Act or any other statute or rule.* [415 ILCS 5/5(d)]
- c) In addition to subsections (a) and (b) the Board has the authority to act as otherwise provided by law.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.108 Board Proceedings

- a) Board proceedings can generally be divided into two categories: rulemaking proceedings and adjudicatory proceedings.
- b) The following are examples of Board rulemaking proceedings: Identical-in-Substance, Clean Air Act/Fast Track, Federally Required Rulemaking, General Rulemaking, and Site-Specific Rulemaking. Procedural rules for these types of proceedings can be found at 35 Ill. Adm. Code 102.
- c) The following are examples of Board adjudicatory proceedings: Enforcement Proceedings (35 Ill. Adm. Code 103), Variance Petitions (35 Ill. Adm. Code 104), Adjusted Standard Petitions (35 Ill. Adm. Code 104), Permit Appeals (35 Ill. Adm. Code 105), Leaking Underground Storage Tank Appeals (35 Ill. Adm.

Code 105), Pollution Control Facility Siting Appeals (35 Ill. Adm. Code 107), and Administrative Citations (35 Ill. Adm. Code 108).

- d) Board decisions will be made at meetings open to the public. Except as provided in subsection (e), 3 members of the Board constitute a quorum, and 3 affirmative votes are required to adopt a Board decision.
- e) At a hearing under Section 34(d) of the Act to determine whether a seal should be removed, *at least one Board Member shall be present, and those Board Members present may render a final decision without regard to the requirements of Section 5(a) of the Act.* [415 ILCS 5/34(d)]

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.110 Public Participation

- a) **General.** The Board encourages public participation in all of its proceedings. The extent to which the law allows for the participation varies, depending on the type of Board proceeding involved, the party status of the person or persons seeking to participate, and the rules governing that type of proceeding. Public participation in particular proceedings may be more specifically delineated by Board or hearing officer order consistent with the provisions of applicable law and the Board's procedural rules. (See Sections 101.114 and 101.628)
- b) **Party/Non-Party Status.** The issue of who constitutes a proper party in each type of adjudicatory proceeding before the Board is addressed in the rules. A person who wishes to participate in a Board adjudicatory proceeding and is not a party will be deemed a participant and will have only those rights specifically provided in these rules. A person who wishes to participate in a Board regulatory proceeding will be deemed a participant and will have only those rights specifically provided in these rules.
- c) **Amicus Curiae Briefs.** Amicus curiae briefs may be filed in any adjudicatory proceeding by any interested person, provided permission is granted by the Board. Response briefs may be allowed by permission of the Board, but not as of right. The briefs must consist of argument only and may not raise facts that are not in evidence in the relevant proceeding. Amicus curiae briefs, and any responses, will be considered by the Board only as time allows. The briefs will not delay decision-making of the Board. (See also Section 101.302(k).)
- d) **Public Remarks at a Board Meeting.** During the time period designated for public remarks, any person physically present, once recognized by the Chairman, may make public remarks to the Board concerning a proceeding listed on that meeting's agenda.

- 1) **Sign-In Sheet.** Beginning at least 15 minutes before the scheduled start of each Board meeting, a public remarks sign-in sheet will be available to the public at the meeting. Anyone who wishes to make public remarks at the meeting must provide the following information on the sign-in sheet:
 - A) Full name;
 - B) Any person he or she is representing; and
 - C) The docket number of the proceeding on which he or she would like to make public remarks.
- 2) **Time Limits.** A time period of up to 30 minutes at the beginning of each Board meeting, as designated on the meeting agenda, is reserved for public remarks. The Chairman may extend the duration of the public remarks portion of the meeting as necessary to accommodate persons who signed in under to subsection (d)(1). A person's public remarks on a given proceeding must not exceed five minutes in length, but this time period may be extended with the Chairman's permission.
- 3) **Nature of Public Remarks.** Public remarks are not made under oath or affirmation and are not subject to cross-examination. Public remarks that are relevant to the proceeding for which they are made may be considered by the Board, but factual statements made during public remarks do not constitute evidence in the proceeding. The public remarks portion of a Board meeting is not a hearing and cannot be used to offer documentary or other physical evidence to the Board. The Chairman may direct persons to cease public remarks that are irrelevant, repetitious, or disruptive. Persons engaging in disorderly conduct may be asked by the Chairman to leave the meeting.
- 4) **Transcription.** The Board will arrange for public remarks to be transcribed. Transcripts of public remarks will be made a part of the record of the proceeding to which the remarks correspond. (See 5 ILCS 120/2.06(g).)

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.111 Informal Recordings of Board Meetings

Any person may record a Board meeting by tape, film, or any other means if the recording process does not interfere with the conduct or decorum of the Board meeting. The Chairman may direct any person who is recording a Board meeting to limit or discontinue the recording if the recording process interferes with the conduct or decorum of the Board meeting.

(Source: Added at 39 Ill. Reg. 2276, effective January 27, 2015)

Section 101.112 Bias and Conflict of Interest

- a) No Board Member or Board employee may represent any other person in any Board proceeding.
- b) No former Board Member or Board employee may represent any other person in any Board proceeding in which he or she participated personally and substantially as a Board Member or Board employee, unless the Board and, as applicable, all parties or proponents in the proceeding consent in writing after disclosure of the participation. For purposes of subsections (a) and (b) representation includes consulting on legal or technical matters, and Board employee means a person the Board employs on a full-time, part-time, contract, or intern basis.
- c) The Board, on its own motion or the motion of any party, may disqualify a hearing officer for bias or conflict of interest as provided by Section 10-30(b) of the IAPA. [5 ILCS 100/10-30(b)]
- d) In accordance with Section 128 of the federal Clean Air Act, at least a majority of Board members must represent the public interest, and must not derive any significant portion of their income from persons subject to permits or enforcement orders under the Clean Air Act or Illinois Environmental Protection Act. Any potential conflicts of interest by Board members must be adequately disclosed.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.114 Ex Parte Communications

- a) For the purposes of this Section, "interested person or party" *means a person or entity whose rights, privileges, or interests are the subject of or are directly affected by a regulatory, quasi-adjudicatory, investment, or licensing matter.* [5 ILCS 430/5-50(d)]
- b) For the purposes of this Section, "Executive Ethics Commission" means the commission created by the State Officials and Employees Ethics Act. [5 ILCS 430]
- c) Adjudicatory and Regulatory Proceedings. Board Members and Board employees must not engage in an ex parte communication designed to influence their action with respect to an adjudicatory or regulatory proceeding pending before or under consideration by the Board. (See definition of "ex parte communication" in Section 101.202) Whenever practicable, an interested person or party or his or her official representative or attorney should make all communications with respect to an adjudicatory or regulatory proceeding pending before or under consideration by the Board in writing and address them to the Clerk rather than to individual Board Members or Board employees. (See Sections 101.110 and 101.628)

- d) Nothing in this Section precludes Board Members or Board employees from receiving informal complaints about individual pollution sources, or forbids the administrative contacts as would be appropriate for judges and other judicial officers. Information about a pollution source included in the record of a regulatory proceeding is not an ex parte communication with respect to any adjudicatory proceeding concerning the pollution source.
- e) When the Clerk on behalf of the Board, a Board member, or a Board employee receives an ex parte communication from an interested person or party or his or her official representative or attorney, the recipient, in consultation with the Board's ethics officer or his or her designee, must promptly memorialize the communication and make it part of the record of the proceeding. To make an oral ex parte communication part of the record, the substance of the oral communication, along with the identity of each person involved in the communication, will be either set forth in a memorandum and placed in the record or announced on the record at a public hearing.
- f) When the Clerk on behalf of the Board, a Board member, or a Board employee receives an ex parte communication, other than an ex parte communication received from an interested person or party or his or her official representative or attorney, that communication must be promptly reported to the Board's ethics officer or his or her designee *by the recipient of the communication and by any other employee of the Board who responds to the communication.* [5 ILCS 430/5-50(c)].
 - 1) *The ethics officer* or his or her designee, in consultation with the recipient of the ex parte communication, must ensure *that the ex parte communication is promptly made part of the record of the proceeding.*
 - 2) *The ethics officer* or his or her designee, in consultation with the recipient of the ex parte communication, must *promptly file the ex parte communication with the Executive Ethics Commission, including:*
 - A) *All written communications;*
 - B) *All written responses to the communications;*
 - C) *A memorandum prepared by the ethics officer stating the nature and substance of all oral communications;*
 - D) *The identity and job title of the person to whom each communication was made;*
 - E) *All responses made;*

- F) *The identity and job title of the person making each response;*
 - G) *The identity of each person from whom the written or oral ex parte communication was received;*
 - H) *The individual or entity represented by that person;*
 - I) *Any action the person requested or recommended; and*
 - J) *Any other pertinent information.*
- 3) *The disclosure shall also contain the date of any ex parte communication.*
[5 ILCS 430/5-50(c)]

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

SUBPART B: DEFINITIONS

Section 101.200 Definitions Contained in the Act

Unless otherwise provided in 35 Ill. Adm. Code 101-130, or unless a different meaning of a word or term is clear from the context, the definitions of the Act apply to the Board's procedural rules, found in 35 Ill. Adm. Code 101 through 130.

Section 101.202 Definitions for Board's Procedural Rules

Unless otherwise provided in 35 Ill. Adm. Code 101-130, or unless a different meaning of a word or term is clear from the context, the following definitions also apply to the Board's procedural rules, found in 35 Ill. Adm. Code 101 through 130:

"Act" means the Environmental Protection Act. [415 ILCS 5]

"Adjudicatory proceeding" means an action of a quasi-judicial nature brought before the Board under authority granted to the Board by Section 5(d) of the Act or as otherwise provided by law. Adjudicatory proceedings include enforcement, variance, permit appeal, pollution control facility siting appeal, Underground Storage Tank (UST) Fund determination, water well set back exception, adjusted standard, and administrative citation proceedings. Adjudicatory proceedings do not include regulatory, quasi-legislative, or informational proceedings.

"Adjusted standard" or "AS" means an alternative standard granted by the Board in an adjudicatory proceeding under Section 28.1 of the Act and 35 Ill. Adm. Code 104.Subpart D. The adjusted standard applies instead of the rule or regulation of general applicability.

"Administrative citation" or "AC" means a citation issued by the Agency or by a

unit of local government acting as the Agency's delegate. (See 35 Ill. Adm. Code 108.)

"Administrative citation review" or "administrative citation appeal" means a petition for review of an administrative citation. (See 35 Ill. Adm. Code 108.)

"Affidavit" means a sworn, signed statement witnessed by a notary public.

"Agency" means the Illinois Environmental Protection Agency as established by Section 4 of the Act.

"Agency public comment" means information submitted to the Agency on a proposed Agency decision either by oral statement made at an Agency public hearing or written statement submitted to the Agency during the period for comment by the public.

"Agency public hearing" means a public proceeding to provide interested persons an opportunity to understand and comment on a proposed Agency decision.

"Agency public hearing record" means the record of the Agency public hearing, as kept by the Agency.

"Agency recommendation" means the document filed by the Agency under Sections 37(a) and 28.1(d)(3) of the Act in which the Agency provides its recommended disposition of a petition for variance or an adjusted standard. This includes a recommendation to deny, or a recommendation to grant with or without conditions. (See 35 Ill. Adm. Code 104.218 and 104.416.)

"Agency record" means a record of final Agency decision, as kept by the Agency, of those documents required by the State agency record meeting the applicable requirements of 35 Ill. Adm. Code Part 105.

"Amicus curiae brief" means a brief filed in a proceeding by any interested person who is not a party. (See Sections 101.110 and 101.628)

"Applicant" means any person who submits, or has submitted, an application for a permit or for local siting approval under any of the authorities to issue permits or granting of siting approval identified in Sections 39, 39.1, and 39.5 of the Act.

"Article" means *any object, material, device or substance, or whole or partial copy thereof, including any writing, record, document, recording, drawing, sample, specimen, prototype, model, photograph, culture, microorganism, blueprint or map.* [415 ILCS 5/7.1]

"Attorney General" means the Attorney General of the State of Illinois or

representatives thereof.

"Authorized representative" means any person who is authorized to act on behalf of another person.

"Board" means the Illinois Pollution Control Board as created in Section 5 of the Act or, if applicable, its designee.

"Board decision" means an opinion or an order voted in favor of by at least three members of the Board at an open Board meeting except in a proceeding to remove a seal under Section 34(d) of the Act.

"Board designee" means an employee of the Board who has been given authority by the Board to carry out a function for the Board (e.g., the Clerk, Assistant Clerk of the Board, or hearing officer).

"Board meeting" means an open meeting held by the Board under Section 5(a) of the Act in which the Board makes its decisions and determinations.

"Board's procedural rules" means the Board's regulations set forth at 35 Ill. Adm. Code 101 through 130.

"Brief" means a written statement that contains a summary of the facts of a proceeding, the pertinent laws, and an argument of how the law applies to the facts supporting a position.

"CAAPP" means the Clean Air Act Permit Program, as adopted in Section 39.5 of the Act.

"CAAPP permit" means any permit issued, renewed, amended, modified or revised pursuant to Section 39.5 of the Act.

"CAAPP permit appeal" means an appeal of a CAAPP permit as addressed by 35 Ill. Adm. Code Part 105.

"Certificate of acceptance" means a certification, executed by a successful petitioner in a variance proceeding, in which the petitioner agrees to be bound by all terms and conditions that the Board has affixed to the grant of variance.

"Chairman" means the Chairman of the Board designated by the Governor under Section 5(a) of the Act.

"Citizen's enforcement proceeding" means an enforcement action brought before the Board under Section 31(d) of the Act by any person who is not authorized to bring the action on behalf of the People of the State of Illinois.

"Clean Air Act" or "CAA" *means the federal Clean Air Act, as now and hereafter amended (42 USC 7401 et seq.).* [415 ILCS 5/39.5]

"Clean Water Act" means the federal Clean Water Act (33 USC 1251 et seq.).

"Clerk" means the Clerk of the Board.

"Clerk's Office On-Line" or "COOL" means the Board's web-based file management system that allows electronic filing of and access to electronic documents in the records of the Board's adjudicatory and regulatory proceedings. COOL is located on the Board's website at <http://www.ipcb.state.il.us/COOL/external/>.

"Complaint" means the initial filing that begins an enforcement proceeding under Section 31 of the Act and 35 Ill. Adm. Code 103.

"Compliance plan" means a detailed description of a program designed to achieve compliance with the Act and Board regulations.

"Copy" means *any facsimile, replica, photograph or other reproduction of an article, and any note, drawing or sketch made of or from an article.* [415 ILCS 5/7.1]

"Counter-complaint" means a pleading that a respondent files setting forth a claim against a complainant. (See 35 Ill. Adm. Code 103.206.)

"Cross-complaint" means a pleading that a party files setting forth a claim against a co-party. (See 35 Ill. Adm. Code 103.206.)

"Cross-media impacts" means impacts that concern multiple environmental areas, such as air, land and/or water.

"Decision date" means the date of the Board meeting immediately preceding the decision deadline.

"Decision deadline" means the last day of any decision period, as established by law, within which the Board is required to render a decision in an adjudicatory proceeding. (See Subpart C. See also Sections 38(a), 40, and 40.1 of the Act that establish 120-day decision deadlines for variances, permit appeals, and review of pollution control facility siting decisions respectively.)

"Decision period" means the period of time established by the Act within which the Board is required to make a Board decision in certain adjudicatory proceedings. (See Subpart C. See also Sections 38(a), 40, and 40.1 of the Act that establish 120-day decision deadlines for variances, permit appeals, and review of pollution control facility siting decisions, respectively.)

"Deinked stock" means paper that has been processed to remove inks, clays, coatings, binders and other contaminants. [415 ILCS 20/2.1]

"Delegated unit" means the unit of local government to which the Agency has delegated its administrative citation or other function under Section 4(r) of the Act.

"Digital signature" means a type of electronic signature created by transforming an electronic document using a message digest function and encrypting the resulting transformation with an asymmetric cryptosystem using the signer's private key such that any person having the initial untransformed electronic document, the encrypted transformation, and the signer's corresponding public key can accurately determine whether the transformation was created using the private key that corresponds to the signer's public key and whether the initial electronic document has been altered since the transformation was made. A digital signature is a security device. [5 ILCS 175/5-105]

"Discovery" means a pre-hearing process that can be used to obtain facts and information about the adjudicatory proceeding in order to prepare for hearing. The discovery tools include depositions upon oral and written questions, written interrogatories, production of documents or things, and requests for admission.

"DNR" means the Illinois Department of Natural Resources.

"DOA" means the Illinois Department of Agriculture.

"Duplicative" means the matter is identical or substantially similar to one brought before the Board or another forum.

"Electronic" includes electrical, digital, magnetic, optical, electromagnetic, or any other form of technology that entails capabilities similar to these technologies. [5 ILCS 175/5-105]

"Electronic document" means any notice, information, or filing generated, communicated, received or stored by electronic means to use in an information system or to transmit from one information system to another. (See 5 ILCS 175/5-105.)

"Electronic signature" means a signature in electronic form attached to or logically associated with an electronic document. [5 ILCS 175/5-105]

"Environmental Management System Agreement" or "EMSA" means the agreement between the Agency and a sponsor, entered into under Section 52.3 of the Act and 35 Ill. Adm. Code 187, that describes the innovative environmental measures to be implemented, schedules to attain goals, and mechanisms for

accountability.

"Enforcement proceeding" means an adjudicatory proceeding brought upon a complaint filed under Section 31 of the Act by the Attorney General, State's Attorney, or other persons, in which the complaint alleges violation of the Act, any rule or regulation adopted under the Act, any permit or term or condition of a permit, or any Board order.

"EPRR Act" means the Electronic Products Recycling and Reuse Act. [415 ILCS 150]

"Ex parte communication" means *any written or oral communication by any person that imparts or requests material information or makes a material argument regarding potential action concerning regulatory, quasi-adjudicatory, investment, or licensing matters pending before or under consideration by the Board. "Ex parte communication" does not include the following:*

statements by a person publicly made in a public forum, including pleadings, transcripts, public comments, and public remarks made part of the proceeding's record;

statements regarding matters of procedure and practice, such as format, the number of copies required, the manner of filing, and the status of a matter; and

statements made by a State employee of the Board to Board members or other employees of the Board. [5 ILCS 430/5-50(b)] For purposes of this definition, "Board employee" means a person the Board employs on a full-time, part-time, contract or intern basis. (See Section 101.114)

"Fast Track rulemaking" means a Clean Air Act rulemaking conducted under Section 28.5 of the Act.

"Federally required rule" means *a rule that is needed to meet the requirements of the federal Clean Water Act, Safe Drinking Water Act, Clean Air Act (including required submission of a State Implementation Plan), or Resource Conservation and Recovery Act, other than a rule required to be adopted under subsection (c) of Section 13, Section 13.3, Section 17.5, subsection (a) or (d) of Section 22.4, or subsection (a) of Section 22.40. [415 ILCS 5/28.2]*

"Filing" means the act of delivering a document or article into the custody of the Clerk with the intention of incorporating that document or article into the record of a proceeding before the Board. The Clerk's Office is located at 100 West Randolph Street, Suite 11-500, Chicago IL 60601. Electronic filing is done through COOL on the Board's website.

"Final order" means an order of the Board that terminates the proceeding leaving nothing further to litigate or decide and that is subject to judicial review. (See Subpart I)

"Frivolous" means a request for relief that the Board does not have the authority to grant, or a complaint that fails to state a cause of action upon which the Board can grant relief.

"Hearing" means a public proceeding conducted by a hearing officer where the parties and other interested persons, as provided for by law and the Board's procedural rules, present evidence and argument regarding their positions.

"Hearing officer" means a person licensed to practice law in the State of Illinois who presides over hearings and otherwise carries out record development responsibilities as directed by the Board.

"IAPA" means the Illinois Administrative Procedure Act. [5 ILCS 100]

"Identical-in-substance rules" or "identical-in-substance regulations" means *State regulations which require the same actions with respect to protection of the environment, by the same group of affected persons, as would federal regulations if USEPA administered the subject program in Illinois.* [415 ILCS 5/7.2]

"Initial filing" means the filing that initiates a Board proceeding and opens a docket. For instance, the initial filing in an enforcement proceeding is the complaint; in a permit appeal it is a petition for review; and in a regulatory proceeding it is the proposal.

"Innovative environmental measures" means any procedures, practices, technologies or systems that pertain to environmental management and are expected to improve environmental performance when applied. (See 35 Ill. Adm. Code 106.Subpart G.)

"Inquiry hearing" means a hearing conducted by the Board for the purpose of seeking input and comment from the public regarding the need for a rulemaking proceeding in a specific area.

"Interlocutory appeal" means an appeal of a Board decision to the appellate court that is not dispositive of all the contested issues in the proceeding. (See Section 101.908) An interlocutory appeal may also be the appeal of a hearing officer ruling to the Board. (See Section 101.518.)

"Intervenor" means a person, not originally a party to an adjudicatory proceeding, who voluntarily participates as a party in the proceeding with permission of the Board. (See Section 101.402.)

"Intervention" means the procedure by which a person, not originally a party to an adjudicatory proceeding, voluntarily comes into the proceeding as a party with the permission the Board. (See Section 101.402.)

"JCAR" means the Illinois General Assembly's Joint Committee on Administrative Rules established by the IAPA (see 5 ILCS 100/5-90).

"Joinder" means the procedure by which the Board adds a person, not originally a party to an adjudicatory proceeding, as a party to the proceeding. (See Section 101.403 and 35 Ill. Adm. Code 103.206.)

"Misnomer" means a mistake in name, giving an incorrect name in a complaint or other document with respect to any properly included party.

"Motion" means a request made to the Board or the hearing officer for the purposes of obtaining a ruling or order directing or allowing some act to be done in favor of the movant. (See definition of "movant" in this Section.)

"Movant" means the person who files a motion.

"New pollution control facility" means *a pollution control facility initially permitted for development or construction after July 1, 1981; or the area of expansion beyond the boundary of a currently permitted pollution control facility; or a permitted pollution control facility requesting approval to store, dispose of, transfer or incinerate, for the first time, any special or hazardous waste.* [415 ILCS 5/3.330(b)]

"Non-disclosable information" means *information which constitutes a trade secret; information privileged against introduction in judicial proceedings; internal communications of the several agencies; information concerning secret manufacturing processes or confidential data submitted by any person under the Act.* [415 ILCS 5/7(a)]

"Notice list" means the list of persons in a regulatory proceeding who will receive all Board opinions and orders and all hearing officer orders. Persons on a notice list generally do not receive copies of motions, public comments, or testimony. (See definition of "service list" in this Section. See also 35 Ill. Adm. Code 102.422.)

"Notice to reinstate" means a document filed that recommences the decision period after a decision deadline waiver has been filed. The notice will give the Board a full decision period in which to make a decision. (See Section 101.308)

"Oral argument" means a formal verbal statement of advocacy on a proceeding's legal questions made at a Board meeting with the Board's permission. (See Section 101.700)

"OSFM" means Office of the State Fire Marshal.

"OSFM appeal" means an appeal of an OSFM final decision concerning eligibility and deductibility made under Title XVI of the Act.

"OSFM record" means a record of final OSFM decision, as kept by the OSFM, of those documents of the OSFM that constitute the OSFM record relating to the eligibility and deductible decision and meeting the applicable requirements of 35 Ill. Adm. Code Part 105.

"Participant" means any person, not including the Board or its staff, who takes part in an adjudicatory proceeding who is not a party, or a person who takes part in a regulatory or other quasi-legislative proceeding before the Board. A person becomes a participant in any of several ways, including filing a comment, being added to the notice list of a particular proceeding, testifying at hearing, or making public remarks at a Board meeting.

"Participant in a CAAPP Comment Process" means a person who takes part in a Clean Air Act Permit Program (CAAPP) permit hearing before the Agency or comments on a draft CAAPP permit.

"Party" means the person by or against whom an adjudicatory proceeding is brought or who is granted party status by the Board through intervention or joinder.

"Party in interest" means the Agency when asked to conduct an investigation under Section 30 of the Act during an ongoing proceeding. (See Section 101.404)

"Peremptory rulemaking" means any rulemaking that is required as a result of federal law, federal rules and regulations, or an order of a court, under conditions that preclude compliance with the general rulemaking requirements of Section 5-40 of the IAPA and that preclude the exercise by the Board as to the content of the rule it is required to adopt. [5 ILCS 100/5-50]

"Permit appeal" means an adjudicatory proceeding brought before the Board under Title X of the Act.

"Person" means any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, political subdivision, state agency, or any other legal entity, or their legal representative, agent or assigns. [415 ILCS 5/3.315]

"Petition" means the initial filing in an adjudicatory proceeding other than an enforcement proceeding, including permit appeals, OSFM appeals, UST appeals, appeals of pollution control facility siting decisions, variances and adjusted

standards.

"Pilot project" means an innovative environmental project that covers one or more designated facilities, designed and implemented in the form of an EMSA. (See Section 52.3 of the Act.)

"Pollution control facility" is defined at Section 3.330(a) of the Act for purposes of this Part and 35 Ill. Adm. Code 107.

"Pollution control facility siting appeal" means an appeal of a decision made by a unit of local government filed with the Board under Section 40.1 of the Act.

"Postconsumer material" means *paper, paperboard, and fibrous wastes from retail stores, office buildings, homes, and so forth, after the waste has been passed through its end usage as a consumer item, including used corrugated boxes, old newspapers, mixed waste paper, tabulating cards, and used cordage.* Additionally, it includes *all paper, paperboard, and other fibrous wastes that are diverted or separated from the municipal solid waste stream.* [415 ILCS 20/3(f)(2)(i) and (ii)] (See also definition of "recycled paper" in this Section.)

"Prehearing conference" means a meeting held in an adjudicatory case to determine the status of the proceedings. A prehearing conference may also be a meeting held in a regulatory proceeding prior to the hearing, the purposes of which *shall be to maximize understanding of the intent and application of the proposal, if possible, and to attempt to identify and limit the issues of disagreement among participants to promote efficient use of time at hearing.* [415 ILCS 5/27(d)] (See 35 Ill. Adm. Code 102.404 and 102.406.)

"Proceeding" means an action conducted before the Board under authority granted under Section 5 of the Act or as otherwise provided by law. Board proceedings are of two types: quasi-legislative (rulemaking and inquiry proceedings) and quasi-judicial (adjudicatory proceedings).

"Proponent" means any person, not including the Board or its staff, who submits a regulatory proposal to the Board for the adoption, amendment, or repeal of a regulation.

"Provisional variance" means a short term variance sought by an applicant and issued by the Agency under Section 35(b) of the Act. (See 35 Ill. Adm. Code 104.Subpart C.)

"PSD" means the Prevention of Significant Deterioration of Air Quality program as authorized by Section 9.1(c) of the Act and as adopted by 35 Ill. Adm. Code Part 204.

"PSD permit" means any PSD permit issued, extended or revised pursuant to

Section 9.1(c) of the Act and 35 Ill. Adm. Code Part 204.

"PSD permit appeal" means an appeal of a PSD permit as addressed by 35 Ill. Adm. Code Part 105.

"Public comment" means information submitted to the Board during a pending proceeding either by oral statement made at hearing or written statement filed with the Board.

"Public remarks" mean an oral statement that is publicly made at a Board meeting and directed to the Board concerning a proceeding listed on that meeting's agenda. (See Section 101.110(d))

"PWSO Act" means the Public Water Supply Operations Act. [415 ILCS 45]

"Qualitative description" means a narrative description pertaining to attributes and characteristics.

"Quantitative description" means a numerically based description pertaining to attributes and characteristics.

"RCRA variance" means a variance from a RCRA rule or a RCRA permit required under Section 21(f) of the Act.

"Record" means the official collection, as kept by the Clerk, of all documents and exhibits including pleadings, transcripts, and orders filed during the course of a proceeding.

"Recycled paper" means paper which contains at least 50% recovered paper material. The recovered paper material must contain at least 45% deinked stock or postconsumer material. (See also "postconsumer material" in this Section.)

"Regulatory hearing" or "proceeding" means a hearing or proceeding held under Title VII of the Act or other applicable law with respect to regulations.

"Regulatory relief mechanisms" means variances, provisional variances and adjusted standards. (See 35 Ill. Adm. Code 104.)

"Representing" means, for purposes of Part 130, *describing, depicting, containing, constituting, reflecting or recording*. [415 ILCS 5/7.1]

"Requester" means, for purposes of Part 130, the person seeking from the agency the material claimed or determined to be a trade secret (see 415 ILCS 5/7.1).

"Resource Conservation and Recovery Act" or "RCRA" means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of

1976 (42 USC 6901 et seq.).

"Responsible Operator in Charge" means an individual who is designated as a Responsible Operator in Charge of a community water supply under Section 1 of the PWSO Act.

"Rulemaking" or "rulemaking proceeding" means a proceeding brought under Title VII of the Act or other applicable law for the purpose of adoption, amendment, or repeal of a regulation.

"Sanction" means a penalty or other mechanism used by the Board to provide incentives for compliance with the Board's procedural rules, Board orders or hearing officer orders. (See also Subpart H)

"SDWA" means the federal Safe Drinking Water Act (42 USC 300f et seq.).

"Service" means delivery of a document upon a person. (See Sections 101.300(c) and 101.304)

"Service list" means the list of persons designated by the hearing officer or Clerk in a regulatory or adjudicatory proceeding upon whom parties or participants must serve motions, prefiled questions and prefiled testimony and any other documents that the parties or participants file with the Clerk unless the hearing officer otherwise directs. (See definition of "notice list" in this Section. See also 35 Ill. Adm. Code 102.422.)

"Severance" means the separation of a proceeding into two or more independent proceedings, each of which terminates in a separate, final judgment.

"Site-specific rule or regulation" means a proposed or adopted regulation, not of general applicability, that applies only to a specific facility, geographic site, or activity. (See 35 Ill. Adm. Code 102.208.)

"Sponsor" means the proponent of a pilot project that enters into an EMSA with the Agency.

"State enforcement proceeding" means an enforcement proceeding, other than a citizen's enforcement proceeding, that is brought under Section 31 of the Act.

"Stay" means a temporary suspension of the regular progress of a proceeding under an order of the Board or by operation of law. (See Section 101.514)

"Subpoena" means a command to appear at a certain time and place to give testimony upon a certain matter.

"Subpoena duces tecum" means a document that compels the production of

specific documents and other items at a specified time and place.

"Summary judgment" means the disposition of an adjudicatory proceeding without hearing when the record, including pleadings, depositions and admissions on file, together with any affidavits, shows that there is no genuine issue of material fact, and that the moving party is entitled to judgment as a matter of law. (See Section 101.516)

"Third party complaint" means a pleading that a respondent files setting forth a claim against a person who is not already a party to the proceeding. (See 35 Ill. Adm. Code 103.206.)

"Trade secret" means *the whole or any portion or phase of any scientific or technical information, design, process (including a manufacturing process), procedure, formula or improvement, or business plan which is secret in that it has not been published or disseminated or otherwise become a matter of general public knowledge, and which has competitive value. A trade secret is presumed to be secret when the owner thereof takes reasonable measures to prevent it from becoming available to persons other than those selected by the owner to have access thereto for limited purposes.* [415 ILCS 5/3.490]

"Transcript" means the official recorded testimony from a hearing or public remarks from a Board meeting.

"USEPA" means the United States Environmental Protection Agency.

"Underground storage tank appeal" or "UST appeal" means an appeal of an Agency final decision made under Title XVI of the Act.

"UST" means underground storage tank.

"Variance" means a temporary exemption from any specified regulation, requirement or order of the Board granted to a petitioner by the Board under Title IX of the Act *upon presentation of adequate proof that compliance with the rule or regulation, requirement or order of the Board would impose an arbitrary or unreasonable hardship.* [415 ILCS 5/35(a)]

"Waiver" means the intentional relinquishing of a known right, usually with respect to a hearing before the Board or entry of a Board decision within the decision period. (See also Section 101.308)

"Website" means the Board's computer-based informational and filing service accessed on the Internet at <http://www.ipcb.state.il.us>.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

**SUBPART C: COMPUTATION OF TIME, FILING, SERVICE OF DOCUMENTS, AND
STATUTORY DECISION DEADLINES**

Section 101.300 Computation of Time

- a) **Computation of Time.** Computation of any period of time prescribed in the Act, other applicable law, or this Subpart will begin with the first calendar day following the day on which the act, event or development occurs and will run until the close of business on the last day, or the next business day if the last day is a Saturday, Sunday or national or State legal holiday.
- b) **Date of Filing.** Documents will be considered filed with the Clerk only if they are filed in compliance with Section 101.302 and any other filing requirements specified elsewhere in the Board's procedural rules (see 35 Ill. Adm. Code 101 through 130). Subpart J sets forth when electronic documents submitted to COOL will be considered filed.
 - 1) If a document is submitted to the Clerk for filing in person, by U.S. Mail, by e-mail or facsimile under Section 101.302(d), or by third-party commercial carrier, the document is considered filed on the date it is received by the Clerk. However, a document received by the Clerk after 4:30 p.m. is considered filed on the next business day. The Clerk will mark the filing date on each filed document.
 - 2) Notwithstanding subsection (b)(1), if the Clerk receives a document by U.S. Mail or third-party commercial carrier after a filing deadline date, the document will be deemed filed on:
 - A) The date the document was provided to the U.S. Postal Service; or
 - B) The date the document was provided to the third-party commercial carrier for delivery to the Clerk within three business days.
 - 3) For purposes of subsection (b)(2), documentation of when the document being filed was provided to the U.S. Postal Service or the third-party commercial carrier consists of the affidavit or certificate required by Section 101.304(d)(2)(A) or (d)(4) and must accompany the document being filed. In addition, for delivery by a third-party commercial carrier, the affidavit or certificate must contain the filing party's representation that the charge for delivery to the Clerk within three business days was prepaid.
 - 4) For purposes of Board decision deadlines, the decision period does not begin until the date marked by the Clerk on the initial filing.
- c) **Date of Service.** Documents will be considered served upon another party only if

they are served in compliance with Section 101.304 and any other service requirements specified elsewhere in the Board's procedural rules. The date of service is determined as follows:

- 1) **Personal Service.** Personal service of a document is complete on the date the document was delivered, as specified in either the affidavit or certificate of service signed by the person who made personal delivery or the declaration of service signed by the process server who made personal delivery.
 - 2) **Service by U.S. Mail or Third-Party Commercial Carrier with Recipient Signature.** If a recipient's signature is recorded by the U.S. Postal Service or a third-party commercial carrier upon delivery of a document, service is complete on the date the document was delivered, as specified in the signed delivery confirmation.
 - 3) **Service by E-Mail or Facsimile.** Service of a document by e-mail or facsimile is complete on the date the document was successfully transmitted, as specified in the affidavit or certificate of service, signed by the party to the proceeding who is serving the document. However, a document successfully e-mailed or faxed on a Saturday or Sunday, on a national or State legal holiday, or after 5:00 p.m. on a weekday is deemed served on the next business day.
 - 4) **Service by U.S. Mail or Third-Party Commercial Carrier without Recipient Signature.** If a recipient's signature is not recorded by the U.S. Postal Service or a third-party commercial carrier upon delivery of a document, service is presumed complete four days after the date the document was provided to the U.S. Postal Service or the third-party commercial carrier.
 - A) The presumption applies only if an affidavit or certificate of service, signed by the party to the proceeding who is serving the document, states the following: the date, the time by when, and the place the document was provided to the U.S. Postal Service or the third-party commercial carrier; the address appearing on the envelope or package containing the document; and that proper postage or the delivery charge was prepaid.
 - B) The presumption can be rebutted by proper proof, which may include delivery tracking information from the website of the U.S. Postal Service or the website of the third-party commercial carrier.
- d) **Date of Board Decision and Date of Service of Final Board Decision.**
- 1) For purposes of statutory decision deadline proceedings, the date of the

Board decision is the date of the Board meeting at which a final Board order was adopted.

- 2) For purposes of appealing a final adjudicatory decision of the Board, the date of service of the final decision is the date on which the party receives the Board's certified mailing of the decision. If a motion for reconsideration is timely filed under Section 101.520, the date of service of the final decision is the date on which the party receives the Board's certified mailing of the Board order ruling upon the motion.
- 3) For purposes of appealing a final rulemaking decision of the Board in which a rule is adopted, amended, or repealed, a person is deemed to have been served with the final decision on the date on which the new rule, the amendment, or the repealer becomes effective under the IAPA. For purposes of appealing a final rulemaking decision in which no rule is adopted, amended, or repealed, the date of service of the final decision is the date on which the participant receives the Board's mailing of the decision. If a motion for reconsideration is timely filed under the Board's procedural rules (35 Ill. Adm. Code 102.700 and 102.702), the date of service of the final decision is the date on which the participant receives the Board's mailing of the Board order ruling upon the motion.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.302 Filing of Documents

- a) This Section contains the Board's general filing requirements. Additional requirements may exist for specific proceedings elsewhere in the Board's procedural rules (see 35 Ill. Adm. Code 101 through 130). The Clerk will refuse for filing any document that does not comply with the minimum requirements of this Section.
- b) All documents to be filed with the Board must be filed with the Clerk.
 - 1) If allowed by the Board, the hearing officer, the Clerk, or the procedural rules to be filed in paper under subsection (h), documents must be filed at the following address:

Pollution Control Board, Attn: Clerk
100 West Randolph Street
James R. Thompson Center, Suite 11-500
Chicago, Illinois 60601-3218
 - 2) All documents filed with the Clerk must provide the name and signature of the person seeking to file the document and identify the name of the person on whose behalf the document is being filed. If a paper document

is submitted for filing, the original must bear the original pen-and-ink signature of the person seeking to file the document. Signatures for purposes of electronic filings through COOL are addressed in Section 101.1010.

- 3) Each document being filed with the Clerk must be accompanied by a notice of filing (see Appendix D) and documentation of service (see Section 101.304(d)).
 - 4) The date on which a document is considered to have been filed is determined under Section 101.300(b).
 - 5) Service of a document upon a hearing officer does not constitute filing with the Clerk unless the document is submitted to the hearing officer during the course of a hearing.
- c) Electronic documents may be filed through COOL under Subpart J. Paper documents may be filed with the Clerk by U.S. Mail, in person, or by third-party commercial carrier.
- d) A filing by e-mail or facsimile will only be allowed with the prior approval of the Clerk of the Board or the hearing officer assigned to the proceeding. Any prior approval by the Clerk or hearing officer applies only to the specified filing.
- e) The initial filings listed in this subsection require filing fees and will only be considered filed when accompanied by the appropriate fee. The fee may be paid in the form of government voucher, money order, or check made payable to the Illinois Pollution Control Board, or electronically through COOL in accordance with Section 101.1040(b)(1), but cannot be paid in cash.
- 1) Petition for Site-Specific Regulation, \$75;
 - 2) Petition for Variance, \$75;
 - 3) Petition for Review of Agency Permit Decision, UST Decision, or any other appeal filed under Section 40 of the Act, \$75;
 - 4) Petition to Review Pollution Control Facility Siting Decisions, under Section 40.1 of the Act, \$75; and
 - 5) Petition for Adjusted Standard, under Section 28.1 of the Act, \$75.
- f) For each document filed with the Clerk, the filing party must serve a copy of the document upon the other parties and, if a hearing officer has been assigned, upon the hearing officer in accordance with Section 101.304.

- g) All documents filed with the Board must contain the relevant proceeding caption and docket number. All documents must be submitted on or formatted to print on 8½ x 11 inch paper, except as provided in subsection (j). Paper documents must be submitted on recycled paper as defined in Subpart B, and double sided. All pages in a document must be sequentially numbered. All documents created by word processing programs must be formatted as follows:
- 1) The margins must each be a minimum one inch on the top, bottom, and both sides of the page; and
 - 2) The size of the type in the body of the text must be no less than 12 point font, and in footnotes no less than 10 point font.
- h) Unless the Board, the hearing officer, the Clerk, or the procedural rules provide otherwise, all documents must be filed through COOL electronically.
- 1) If a document is filed in paper, the original and two copies of the document (three total) are required. If a document is filed through COOL in accordance with Subpart J, no paper original or copy of the document is required.
 - 2) The following documents must be filed through COOL or on compact disk or other portable electronic data storage device, meet the requirements of Section 101.1030(g) and, to the extent technically feasible, in text-searchable Adobe PDF:
 - A) The Agency record required by 35 Ill. Adm. Code 105.212, 105.302, ~~or 105.410~~, or 105.612 or 35 Ill. Adm. Code 125.208 (see 35 Ill. Adm. Code 105.116);
 - B) The OSFM record required by 35 Ill. Adm. Code 105.508 (see 35 Ill. Adm. Code 105.116);
 - C) The local siting authority record required by 35 Ill. Adm. Code 107.302 (see 35 Ill. Adm. Code 107.304); and
 - D) A petition filed under 35 Ill. Adm. Code 104 or 35 Ill. Adm. Code 106 (see 35 Ill. Adm. Code 104.106 and 35 Ill. Adm. Code 106.106)
 - 3) A document containing information claimed or determined to be a trade secret, or other non-disclosable information under 35 Ill. Adm. Code 130, is prohibited from being filed electronically and must instead be filed only in paper. The version of the document that is redacted under 35 Ill. Adm. Code 130 must be filed through COOL.

- 4) When filing a rulemaking proposal, if any document protected by copyright law (17 USC 101 et seq.) is proposed under Section 5-75 of the IAPA. [5 ILCS 100/5-75] to be incorporated by reference, the copyrighted document is prohibited from being filed electronically, but the remainder of the rulemaking proposal must be filed through COOL. In addition, the rulemaking proponent must:
 - A) File a paper original of the copyrighted document. The rulemaking proposal also must include:
 - i) The copyright owner's written authorization for the Board to make, at no charge to the Board, no more than a total of two paper copies of the copyrighted document if the Board is required by State law to furnish a copy to JCAR, a court, or a member of the public during or after the rulemaking; or
 - ii) The proponent's representation that it will, at its own expense, promptly acquire and deliver to the Clerk's Office no more than a total of two paper originals of the copyrighted document if the Clerk's Office notifies the proponent in writing that the Board is required by State law to furnish a copy to JCAR, a court, or a member of the public during or after the rulemaking; or
 - B) File a license or similar documentation of access that, at no charge to the Board, gives the Board the rights, during and after the rulemaking, to do the following: electronically access the copyrighted document from the sole designated computer at the Board's Chicago office; print a single copy of the copyrighted document to maintain at the Board's Chicago office; and print no more than a total of two copies of the copyrighted document if the Board is required by State law to furnish a copy to JCAR, a court, or a member of the public.
- i) No written discovery, including interrogatories, requests to produce, and requests for admission, or any response to written discovery, may be filed with the Clerk of the Board except with permission or direction of the Board or hearing officer. Any discovery request under these rules to any nonparty must be filed with the Clerk of the Board in accordance with subsection (h).
- j) Oversized Exhibits. When reasonably practicable, oversized exhibits must be reduced to conform to or be formatted to print on 8½ x 11 inch paper for filing with the Clerk's Office. However, even when an oversized exhibit is so reduced or formatted, the original oversized exhibit still must be filed with the Clerk's Office. In accordance with 2 Ill. Adm. Code 2175.300, the original oversized

exhibit may be returned to the person who filed it.

- k) **Page Limitation.** No motion, brief in support of a motion, or brief may exceed 50 pages, and no amicus curiae brief may exceed 20 pages, without prior approval of the Board or hearing officer. These limits do not include appendices containing relevant material; however, materials that may be readily available to the Board, such as prior Board opinions and orders, federal and Illinois regulations, and federal and Illinois statutes, need not be included in appendices.
- l) **Documents filed that do not meet the requirements of 35 Ill. Adm. Code. Subtitle A** may be rejected by the Clerk or the hearing officer. Any rejection of a filing will include a description of the Board's rules that have not been met.

(Source: Amended at 40 Ill. Reg. 7912, effective May 20, 2016)

Section 101.304 Service of Documents

- a) **Service Requirements.** This Section contains the Board's general service requirements. However, the more specific Part for a proceeding type may contain additional requirements.
- b) **Duty to Serve and When to Initiate Service.** A party filing a document with the Clerk under Section 101.302 must also serve one copy of the document upon each of the other parties to the adjudicatory proceeding and, if a hearing officer has been assigned, upon the assigned hearing officer. Service of a document must be initiated concurrently with submitting the document to the Clerk for filing.
 - 1) Service of a document upon a party must be made upon a person authorized by law to receive service on behalf of the party. If a party is represented by an attorney who has filed an appearance, service upon the party is made by serving the document upon the party's attorney. If more than one attorney appears for a party, service upon one of the party's attorneys is sufficient.
 - 2) Each document being served (e.g., enforcement complaint, petition for review) must be accompanied by a notice of filing (see Appendix D) and a copy of the documentation of service (see subsection (d)).
 - 3) The date on which service of a document is considered to have been completed is determined under Section 101.300(c).
 - 4) A proceeding is subject to dismissal, and the filing party is subject to sanctions, if service is not timely initiated or completed.
 - 5) Whether service of a document was proper may be challenged by the party allegedly served. To avoid waiving the right to contest personal

jurisdiction, any challenge to service must be made under Section 101.400(a)(5).

c) **Methods of Service.** A document must be served in one of the following ways:

- 1) Except as provided in subsection (c)(2), service of documents may be made by any of the following methods:
 - A) Personal service;
 - B) U.S. Mail;
 - C) Third-party commercial carrier;
 - D) E-mail in accordance with Subpart J; and
 - E) Facsimile, but only if the party being served has filed a notice consenting to receipt of facsimile service and not filed a notice revoking that consent.
- 2) Service of enforcement complaints and EMSA statements of deficiency upon respondents must be made by:
 - A) Personal service;
 - B) U.S. Mail with a recipient's signature recorded by the U.S. Postal Service upon delivery; or
 - C) A third-party commercial carrier with a recipient's signature recorded by the third-party commercial carrier upon delivery.
- 3) Service of administrative citations must be made as required under 35 Ill. Adm. Code 108.

d) **Documentation of Service and When to File Documentation of Service.** A party serving a document upon another party must also file documentation of that service. A proceeding is subject to dismissal, and the filing party is subject to sanctions, if documentation of service is not timely filed with the Clerk. Documenting service and filing that documentation must be done as follows:

- 1) For personal service of a document, either an affidavit or certificate of service signed by the person who made personal delivery or a declaration of service signed by the process server who made personal delivery must accompany the document being filed with the Clerk. However, if the signed affidavit, certificate or declaration is not available to the filing party when the document is filed with the Clerk, the filing must include:

- A) An affidavit or certificate of service, signed by the filing party, stating that service has been initiated, but not yet completed, and the providing the following: the date, the time by when, and the place the document was provided to the person making personal delivery; the address appearing on the envelope or package containing the document; and a statement that the delivery charge was prepaid; and
 - B) Within seven days after it becomes available to the filing party, the affidavit or certificate of service containing the signature of the person who made personal delivery or the declaration of service containing the signature of the process server, accompanied by a notice identifying the filed document to which the signed affidavit, certificate or declaration corresponds. A copy of the signed affidavit, certificate, or declaration and the notice must be served under subsection (a).
- 2) For service of a document by U.S. Mail or third-party commercial carrier with a recipient's signature recorded by the U.S. Postal Service or the third-party commercial carrier upon delivery, the delivery confirmation containing the recipient's signature must accompany the document being filed with the Clerk. However, if the delivery confirmation containing the recipient's signature is not available to the filing party when the document is filed with the Clerk, the filing must include:
 - A) An affidavit or certificate of service, signed by the filing party, stating that service has been initiated, but not yet completed, and providing the following: the date, the time by when, and the place the document was provided to the U.S. Postal Service or the third-party commercial carrier; the address appearing on the envelope or package containing the document; and a statement that proper postage or the delivery charge was prepaid; and
 - B) Within seven days after it becomes available to the filing party, the delivery confirmation containing the recipient's signature, accompanied by a notice identifying the filed document to which the signed delivery confirmation corresponds. A copy of the delivery confirmation and the notice must be served under subsection (a).
- 3) For service of a document by e-mail or facsimile, an affidavit or certificate of service must accompany the document being filed with the Clerk. An affidavit or certificate of e-mail service must comply with Section 101.1060. An affidavit or certificate of facsimile service must include the date and time of the facsimile transmission, the telephone number to

which the transmission was sent, the number of pages transmitted, and a statement that the document was served by facsimile.

- 4) For service of a document by U.S. Mail or a third-party commercial carrier without a recipient's signature recorded by the U.S. Postal Service or the third-party commercial carrier upon delivery, an affidavit or certificate of service must accompany the document being filed with the Clerk. The affidavit or certificate must state the following: the date, the time by when, and the place the document was provided to the U.S. Postal Service or the third-party commercial carrier; the address appearing on the envelope or package containing the document; and that proper postage or the delivery charge was prepaid.
- 5) An affidavit of service must be notarized and is for use by a non-attorney. A certificate of service is for use by an attorney. Sample forms of an affidavit of service and a certificate of service are available in Appendices E and H.
- 6) A certificate of service must bear an attorney's signature. Signatures in affidavits of service, declarations of service, and delivery confirmations must be written by hand. A handwritten signature in documentation of service filed with the Clerk may be a facsimile or digitized electronic signature.
- e) Service of Amicus Curiae Briefs. Any person who files an amicus curiae brief with the Board in any proceeding must serve copies of that brief on all parties in accordance with this Section.
- f) Service of Comments of Participants in an Adjudicatory Proceeding. Participants are required to serve comments upon the parties to the proceeding. The Board will consider the comments as time and the Act or other applicable law allow.
- g) Service on Agencies. Service must be at the addresses listed below unless a specific person has an appearance on file with the Board or has, in accordance with Section 101.1070, consented to e-mail service.
 - 1) Service on the Illinois Environmental Protection Agency. The Agency must be served at:

Division of Legal Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield IL 62794-9276
epa.dlc@illinois.gov

- 2) Service on Office of State Fire Marshal. The OSFM must be served at:

Division of Petroleum and Chemical Safety
Office of the State Fire Marshal
1035 Stevenson Dr.
Springfield IL 62703

- 3) Service on the Illinois Attorney General. The Office of the Attorney General must be served at:

Division Chief of Environmental Enforcement
Office of the Attorney General
100 West Randolph St., Suite 1200
Chicago IL 60601
enviro@atg.state.il.us

- 4) Service on the Illinois Department of Natural Resources. DNR must be served at:

Office of Legal Services
Illinois Department of Natural Resources
One Natural Resources Way
Springfield IL 62702-1271

- 5) Service on the Illinois Department of Transportation. IDOT must be served at:

Office of Chief Counsel
DOT Administration Building
2300 S. Dirksen Parkway, Room 300
Springfield IL 62764

- 6) Service on Region V of the United States Environmental Protection Agency. USEPA Region V must be served at:

USEPA, Region V
77 West Jackson
Chicago IL 60604

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.306 Incorporation of Documents from Another Proceeding

- a) Upon the separate written request of any person or on its own initiative, the Board or hearing officer may incorporate materials from the record of another Board docket into any proceeding. The person seeking incorporation must file the

material to be incorporated with the Board in accordance with Section 101.302(h). The person seeking incorporation must demonstrate to the Board or the hearing officer that the material to be incorporated is authentic, credible, and relevant to the proceeding. Notice of the request must be given to all identified participants or parties by the person seeking incorporation.

- b) The Board will give the incorporated matter the appropriate weight in light of the following factors: the standard of evidence under which the material was previously presented to the Board; the present purpose for incorporating the material; and the past and current opportunity for cross-examination of the matters asserted within the incorporated material.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.308 Statutory Decision Deadlines and Waiver of Deadlines

- a) Petitions in the following proceedings each have a 120-day statutory decision deadline: Variances (Section 38 of the Act), Permit Appeals and UST appeals (Section 40 of the Act), ~~and~~ Pollution Control Facility Siting Review (Section 40.1 of the Act), CAAPP permit appeals (Section 40.2 of the Act), and PSD permit appeals (Section 40.3 of the Act). Other adjudicatory proceedings may be subject to decision deadlines as provided by law.
- b) Where the petitioner does not waive the decision deadline, the Board will proceed expeditiously to establish all hearing and filing requirements. Willful or unexcused failure to follow Board requirements on the deadlines will subject the party to sanctions under Subpart H. This Section will be strictly construed where there is a decision deadline unless the Board receives a waiver as set out in subsection (c).
- c) All waivers of a deadline for Board action must be filed as a separate document. Waivers must be titled and state which type of waiver it is, identify the proceeding by name and docket number, and be signed by the party or by an authorized representative or attorney. A waiver of a statutory deadline does not preclude the Board from issuing an opinion or order prior to any decision deadline, nor does it preclude the filing of a motion seeking a decision on the matter.
 - 1. An open waiver waives the decision deadline completely and unequivocally until the petitioner elects to reinstate the 120-day decision period by filing a notice to reinstate. Upon proper filing of the notice, the decision period is reinstated. In accordance with Section 101.300(b)(4), the decision period recommences as of the date the notice to reinstate is filed with the Board.

- 2) A time certain waiver must be expressed in length of days or to a specific calendar date. If expressed in length of days, day one will be the first day after the date upon which the current time clock expires. If the petitioner files a time certain waiver before the hearing date, the waiver must be for at least 40 days. If the extension is not renewed for at least 40 days prior to the decision deadline, the Board will set the matter for hearing.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

SUBPART D: PARTIES, JOINDER, AND CONSOLIDATION

Section 101.400 Appearances, Withdrawals, and Substitutions of Attorneys in Adjudicatory Proceedings

- a) Appearances. A person who is a party in a Board adjudicatory proceeding may appear as follows:
 - 1) Individuals may appear on their own behalf or through an attorney-at-law licensed and registered to practice law. (See Section 1 of the Attorney Act. [705 ILCS 205/1])
 - 2) When appearing before the Board, any person other than individuals must appear through an attorney-at-law licensed and registered to practice law. (See Section 1 of the Corporation Practice of Law Prohibition Act. [705 ILCS 220/1] and Section 1 of the Attorney Act.
 - 3) An out-of-state attorney may appear as counsel and provide legal services in a particular proceeding before the Board only if the attorney has permission to do so under Illinois Supreme Court Rule 707. No Board order is required for an out-of-state attorney to appear and no motion to appear pro hac vice is necessary. The out-of-state attorney's appearance must include the following:
 - A) A representation that the out-of-state attorney is in, and will maintain throughout the proceeding, compliance with Supreme Court Rule 707; and
 - B) Identification of the active status Illinois attorney associated with the out-of-state attorney under Supreme Court Rule 707 and the date on which the active status Illinois attorney filed an appearance in the proceeding.
 - 4) Any attorney appearing in a representative capacity must file a separate written appearance with the Clerk, together with documentation of service of the appearance under Section 101.304(d) and notice of filing of the appearance under Section 101.304(b)(2). The appearance must include:

- A) For law firms, the Agency, and the Attorney General's Office, a lead attorney must be designated for purposes of phone and mail contact pertaining to the proceeding. Absent written notice, the Board will designate the attorney whose signature appears first on the party's first filing as the lead attorney.
 - B) The attorney's business address and designation of a primary e-mail address for service by e-mail. Up to two secondary e-mail addresses may also be included.
- 5) Any person seeking to contest personal jurisdiction must do so by filing a motion with the Board in accordance with Section 2-301 of the Code of Civil Procedure. [735 ILCS 5/2-301]
- b) Withdrawals. An attorney who has appeared in a representative capacity and who wishes to withdraw from that representation must file a notice of withdrawal with the Clerk, together with documentation of service and notice of filing on all parties or their representatives.
 - c) Substitution. Any attorney who substitutes for an attorney of record must file a written appearance under subsection (a). That appearance must identify the attorney for whom the substitution is made. However, no attorney will be considered withdrawn from a proceeding until a formal withdrawal is filed in accordance with subsection (b).
 - d) Any person may appear on behalf of himself or others in a rulemaking proceeding in accordance with 35 Ill. Adm. Code 102.100(b).

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.402 Intervention of Parties

- a) The Board may permit any person to intervene in any adjudicatory proceeding. If a person seeks to intervene in an adjudicatory proceeding, the person must file a motion to do so with the Clerk and serve a copy of the motion on all parties to the proceeding. The motion must set forth the grounds for intervention.
- b) In determining whether to grant a motion to intervene, the Board will consider the timeliness of the motion and whether intervention will unduly delay, materially prejudice, or otherwise interfere with an orderly or efficient proceeding.
- c) Subject to subsection (b), the Board will permit any person to intervene in any adjudicatory proceeding if:

- 1) The person has an unconditional statutory right to intervene in the proceeding; or
 - 2) It may be necessary for the Board to impose a condition on the person.
- d) Subject to subsection (b), the Board may permit any person to intervene in any adjudicatory proceeding if:
- 1) The person has a conditional statutory right to intervene in the proceeding;
 - 2) The person may be materially prejudiced absent intervention; or
 - 3) The person is so situated that the person may be adversely affected by a final Board order.
- e) An intervenor will have all the rights of an original party to the adjudicatory proceeding, except that the Board may limit the rights of the intervenor as justice may require. The limits may include providing that: the intervenor is bound by Board and hearing officer orders already issued or by evidence already admitted; that the intervenor does not control any decision deadline; and that the intervenor cannot raise issues that were raised or might more properly have been raised at an earlier stage of the proceeding.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.403 Joinder of Parties

- a) The Board, on its own motion or the motion of any party, may add a person as a party to any adjudicatory proceeding if:
 - 1) A complete determination of a controversy cannot be had without the presence of the person who is not already a party to the proceeding;
 - 2) The person who is not already a party to the proceeding has an interest that the Board's order may affect; or
 - 3) It may be necessary for the Board to impose a condition on the person who is not already a party to the proceeding.
- b) The Board will not dismiss an adjudicatory proceeding for misjoinder of parties. The Board will not dismiss an adjudicatory proceeding for nonjoinder of persons who must be added to allow the Board to decide an action on the merits without first providing a reasonable opportunity to add the persons as parties. As justice may require, the Board may add new parties and dismiss misjoined parties at any stage of an adjudicatory proceeding.

Section 101.404 Agency as a Party in Interest

Under Section 30 of the Act, the Board may request that the Agency investigate any alleged violation of the Act, the regulations, any permit granted by the Agency, or any term or condition of any such permit and any such other investigations as the Board may deem advisable. Upon such request, the Board may designate the Agency as a party in interest in any ongoing proceeding in that matter. The designation of the Agency as a party in interest does not require the Agency to take a position on the merits of the proceeding.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.406 Consolidation of Claims

The Board, upon the motion of any party or upon its own motion, may consolidate two or more proceedings for the purpose of hearing or decision or both. The Board will consolidate the proceedings if consolidation is in the interest of convenient, expeditious, and complete determination of claims, and if consolidation would not cause material prejudice to any party. The Board will not consolidate proceedings where the burdens of proof vary.

Section 101.408 Severance of Claims

Upon motion of any party or on the Board's own motion, in the interest of convenient, expeditious, and complete determination of claims, and where no material prejudice will be caused, the Board may sever claims involving any number of parties.

SUBPART E: MOTIONS**Section 101.500 Filing of Motions and Responses**

- b) The Board may entertain any motion the parties wish to file that is permissible under the Act or other applicable law, these rules, or the Illinois Code of Civil Procedure.
- b) All motions must be in writing, unless made orally on the record during a hearing or during a status conference, and must state whether directed to the Board or to the hearing officer. Oral motion to the Board made at hearing must be filed in writing within 14 days after the hearing or the motion is deemed waived. Motions that should be directed to the hearing officer are set out in Section 101.502. All motions must be filed and served in conformance with Subparts C and J.
- c) Motions may be filed at any time unless otherwise specifically provided.
- d) Within 14 days after service of a motion, a party may file a response to the motion. If no response is filed, the party will be deemed to have waived objection to the granting of the motion, but the waiver of objection does not bind the Board or the hearing officer in its disposition of the motion. Unless undue delay or

material prejudice would result, neither the Board nor the hearing officer will grant any motion before expiration of the 14 day response period except in deadline driven proceedings where no waiver has been filed. Parties may request that the Board grant more time to respond by filing a motion for extension of time.

- e) The moving person will not have the right to reply, except as permitted by the Board or the hearing officer to prevent material prejudice. A motion for permission to file a reply must be filed with the Board within 14 days after service of the response.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.502 Motions Directed to the Hearing Officer

- a) The hearing officer has the authority to rule on all motions that are not dispositive of the proceeding. Dispositive motions include motions to dismiss, motions to decide a proceeding on the merits, motions to strike any claim or defense for insufficiency or want of proof, motions claiming lack of jurisdiction, motions for consolidation, motions for summary judgment, and motions for reconsideration. Oral motions directed to a hearing officer at a status conference will be summarized in a written hearing officer order. The duties and authorities of the hearing officer are further set out in Section 101.610.
- b) An objection to a hearing officer ruling made at hearing will be deemed waived if not filed within 14 days after the Board receives the hearing transcript.
- c) Unless otherwise ordered by the Board, neither the filing of a motion, nor any appeal to the Board of a hearing officer order will stay the proceeding or extend the time for the performance of any act. Unless otherwise provided, all hearing officer orders will remain in effect during the pendency of any appeal to the Board.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.504 Contents of Motions and Responses

All motions and responses must state the grounds upon which the motion is made and must contain a concise statement of the position or relief sought. Facts asserted that are not of record in the proceeding must be supported by oath, affidavit, or certification in accordance with Section 1-109 of the Code of Civil Procedure [735 ILCS 5/1-109]. A brief or memorandum in support of the motion or response may be included.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.506 Motions Attacking the Sufficiency of the Petition, Complaint, or Other Pleading

All motions to strike, dismiss, or challenge the sufficiency of any pleading filed with the Board must be filed within 30 days after the service of the challenged document, unless the Board determines that material prejudice would result.

Section 101.508 Motions to Board Preliminary to Hearing

Motions that a party desires the Board to rule on before hearing should be filed 21 days prior to the regularly scheduled Board meeting before the noticed hearing date. Any motion filed after the above prescribed time will be considered by the Board if time permits.

Section 101.510 Motions to Cancel Hearing

- a) Time to File. Unless the Board or the hearing officer orders otherwise the hearing officer may grant motions to cancel hearings that are filed no fewer than 10 days or, if all parties agree to the motion, 5 days before the scheduled hearing date. The hearing officer may grant a motion filed after the prescribed time only if the movant demonstrates that the movant will suffer material prejudice if the hearing is not canceled.
- b) Contents. All motions to cancel a hearing must set forth a proposed date to reschedule the hearing and must be supported by an affidavit of the person or persons with knowledge of the facts that support the motion. The affidavit must include the factual basis for the request to cancel and a complete status report that describes the progress of the proceeding and sets forth the number of cancellation requests previously granted to the movant. The hearing officer will grant the motion only if the movant demonstrates that the request to cancel is not the result of the movant's lack of diligence.
- c) In a proceeding for which there is a decision deadline, the hearing officer will deny a motion to cancel a hearing if the decision deadline does not allow enough time for the Board to reschedule the hearing, provide the required notice of the rescheduled hearing, complete the hearing, and deliberate and decide the matter.
- d) If the hearing officer grants a motion to cancel a hearing, the hearing officer will revise the schedule to complete the record in accordance with Section 101.612. The hearing officer also will file the revised schedule with the Clerk and serve a copy of the revised schedule on all parties in accordance with Subpart C.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.512 Motions for Expedited Review

- a) Motions for expedited review must be directed to the Board. All motions for expedited review must contain a complete statement of the facts and reasons for the request and must be accompanied by an oath or affirmation attesting that the facts cited are true.
- b) In acting on a motion for expedited review, the Board will, at a minimum, consider all statutory requirements and whether material prejudice will result from the motion being granted or denied.
- c) The Board will grant a motion for expedited review consistent with available resources and decision deadlines.

Section 101.514 Motions to Stay Proceedings

- a) Motions to stay a proceeding must be directed to the Board and must be accompanied by sufficient information detailing why a stay is needed, and in decision deadline proceedings, by a waiver of any decision deadline. A status report detailing the progress of the proceeding must be included in the motion. (See also Section 101.308.)
- b) If the motion to stay is granted, at the close of the stay, the parties must file a status report in accordance with Subpart C. Additional requests for stay of the proceedings must be directed to the hearing officer.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.516 Motions for Summary Judgment

- a) Any time after the opposing party has appeared (or after the expiration of time within which any party is required to appear), but no fewer than 30 days prior to the regularly scheduled Board meeting before the noticed hearing date, a party may move the Board for summary judgment for all or any part of the relief sought. Any response to a motion for summary judgment must be filed within 14 days after service of the motion for summary judgment. The hearing officer may extend the filing and response deadlines contained in this subsection upon written motion by a party, consistent with any statutory deadlines.
- b) If the record, including pleadings, depositions and admissions on file, together with any affidavits, shows that there is no genuine issue of material fact, and that the moving party is entitled to judgment as a matter of law, the Board will enter summary judgment.
- c) Any party wishing to cancel a hearing pending decision on a motion for summary judgment must file a motion to cancel hearing under Section 101.510.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.518 Motions for Interlocutory Appeal from Hearing Officer Orders

Interlocutory appeals from a ruling of the hearing officer may be taken to the Board by filing a motion within 14 days after receipt of the hearing officer's written order. However, if the hearing officer's ruling is rendered on the record at hearing, any motion for interlocutory appeal must be filed within 14 days after the hearing. Filing a motion for interlocutory appeal will not postpone a scheduled hearing, stay the effect of the hearing officer's ruling, or otherwise stay the proceeding. Failure of a party to timely file a motion for interlocutory appeal constitutes a waiver of any objection to the hearing officer's ruling.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.520 Motions for Reconsideration

- a) Any motion for reconsideration or modification of a Board order must be filed within 35 days after the receipt of the order. (See Section 101.902.)
- b) Any response to a motion for reconsideration or modification must be filed within 14 days after the filing of the motion.
- d) A timely-filed motion for reconsideration or modification stays the effect of the order until final disposition of the motion in accordance with Section 101.300(d)(2).

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.522 Motions for Extension of Time

The Board or hearing officer, for good cause shown on a motion after notice to the opposite party, may extend the time for filing any document or doing any act which is required by these rules to be done within a limited period, either before or after the expiration of time.

SUBPART F: HEARINGS, EVIDENCE, AND DISCOVERY**Section 101.600 Hearings**

- a) All hearings are open to the public and are held in compliance with the Americans with Disabilities Act of 1990 (42 USC 12101 et seq.). The hearings will be held at locations ordered by the hearing officer. The hearing officer will select hearing locations that comply with any geographic requirements imposed by applicable law and, to the extent feasible, promote the attendance of interested members of the public, the convenience of the parties, and the conservation of the Board's resources. All hearings are subject to cancellation without notice. Interested persons may contact the Clerk's Office or the hearing officer for information

about the hearing. Parties, participants, and members of the public must conduct themselves with decorum at the hearing.

- b) Any Board hearing may be held by videoconference. Upon its own motion or the motion of any party, the Board or the hearing officer may order that a hearing be held by videoconference. In deciding whether a hearing should be held by videoconference, factors that the Board or the hearing officer will consider include cost-effectiveness, efficiency, facility accommodations, witness availability, public interest, the parties' preferences, and the proceeding's complexity and contentiousness.

(Source: Amended at 40 Ill. Reg. 7912, effective May 20, 2016)

Section 101.602 Notice of Board Hearings

- a) The hearing officer will give the parties at least 21 days written notice of a hearing.
- b) The Clerk will provide notice of all hearings, except for administrative citation hearings, in a newspaper of general circulation in the county in which the facility or pollution source is located, or where the activity in question occurred. Unless otherwise required by applicable law, when a hearing is to be held to satisfy the public hearing requirement of the Clean Air Act (42 USC 7401 *et seq.*) for State Implementation Plan revisions, the Clerk will give notice of the hearing by publication in the Illinois Register in lieu of newspaper notice. Notice must be published at least 21 days before the hearing. If the proceeding involves federal rules that the State has been delegated authority to administer, notice must be published at least 30 days before the hearing.
- c) *Whenever a proceeding before the Board may affect the right of the public individually or collectively to the use of community sewer or water facilities provided by a municipally owned or publicly regulated company, the Board shall at least 30 days prior to the scheduled date for the first hearing in the proceeding, give notice of the date, time, place, and purpose of the hearing by public advertisement in a newspaper of general circulation in the area of the State concerned [415 ILCS 5/33(c)].*

(Source: Amended at 40 Ill. Reg. 7912, effective May 20, 2016)

Section 101.604 Formal Board Transcript

All Board hearings will be transcribed by a certified court reporter in accordance with Section 32 of the Act or other applicable law. Any party or witness may file a motion with the hearing officer to correct the transcript within 21 days after receipt of the transcript in the Clerk's Office. Failure of any party or witness to timely file a motion to correct the transcript constitutes a waiver of the right to correct, unless material prejudice results.

Section 101.606 Informal Recordings of the Proceedings

Informal recording of Board proceedings is allowed as provided for in this Section. The hearing officer may prohibit audio or video recording at hearing if a witness refuses to testify on the grounds that the witness may not be compelled to testify if any portion of the testimony is to be broadcast or televised. If the hearing officer determines that recording is disruptive or detrimental to proper development of the record, the hearing officer may limit or prohibit audio and/or video recording.

Section 101.608 Default

- a) Failure of a party to appear at the hearing, or failure to proceed as ordered by the Board or hearing officer, will constitute default.
- b) If a respondent fails to appear at hearing, the complainant or petitioner must prove its prima facie case in order to prevail on the merits.

Section 101.610 Duties and Authority of the Hearing Officer

The hearing officer has the duty to manage proceedings assigned, to set hearings, to conduct a fair hearing, to take all necessary action to avoid delay, to maintain order, and to ensure development of a clear, complete, and concise record for timely transmission to the Board. The hearing officer has all powers necessary to these ends, including the authority to:

- a) Require parties to proceed to hearing and establish a schedule for, and notice and service of, any prefiled submission of testimony and written exhibits;
- b) Administer oaths and affirmations;
- c) Allow for the examination of or examine witnesses to ensure a clear and complete record;
- d) Regulate the course of the hearing, including controlling the order of proceedings;
- e) Establish reasonable limits on the duration of the testimony and questioning of any witness, and limit repetitive or cumulative testimony and questioning;
- f) Determine that a witness is adverse, hostile, or unwilling under Section 101.624;
- g) Issue an order compelling the answers to interrogatories or responses to other discovery requests;
- h) Order the production of evidence under Section 101.614;

- i) Order the filing of any required Agency record, OSFM record, local siting authority record or recommendation in a manner which provides for a timely review and development of issues prior to the hearing and consistent with any statutory decision deadline;
- j) Initiate, schedule, and conduct a pre-hearing conference;
- k) Order a briefing and comment schedule and exclude late-filed briefs and comments from the record;
- l) Rule upon objections and evidentiary questions;
- m) Order discovery under Sections 101.614 and 101.616;
- n) Rule on any motion directed to the hearing officer or deferred to the hearing officer by the Board in accordance with Section 101.502;
- o) Set status report schedules;
- p) Require all participants in a rulemaking proceeding to state their positions with respect to the proposal; and
- q) Rule upon offers of proof and receive evidence and rule upon objections to the introduction of evidence.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.612 Schedule to Complete the Record

- a) The hearing officer must establish a schedule to complete the record by hearing officer order. The schedule may provide dates and deadlines for pre-hearing conferences, discovery completion, and hearing and post-hearing submissions (including public comments). The schedule must provide for a completed record at least 30 days before the decision date, unless the hearing officer orders otherwise to prevent material prejudice. The hearing officer must file the schedule with the Clerk and serve a copy of the schedule on all parties in accordance with Subpart C.
- b) The hearing officer may rule upon any motion to revise the schedule to complete the record. The hearing officer may grant the motion to the extent that the revised schedule provides for a completed record at least 30 days before the decision date or to prevent material prejudice. If the hearing officer grants a motion to revise the schedule, the hearing officer must file the revised schedule with the Clerk and serve a copy of the revised schedule on all parties in accordance with Subpart C. (See also Section 101.510(d).)

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.614 Production of Information

The hearing officer may, on his or her own motion or on the motion of any party, order the production of information that is relevant to the matter under consideration. The hearing officer will deny, limit or condition the production of information when necessary to prevent undue delay, undue expense, or harassment, or to protect materials from disclosure consistent with Sections 7 and 7.1 of the Act and 35 Ill. Adm. Code 130.

Section 101.616 Discovery

The assigned hearing officer will set all time deadlines for discovery not already provided for in this Subpart consistent with Board deadlines. For purposes of discovery, the Board may look to the Code of Civil Procedure and the Supreme Court Rules for guidance where the Board's procedural rules are silent (see Section 101.100(b)). All discovery disputes will be handled by the assigned hearing officer.

- a) All relevant information and information calculated to lead to relevant information is discoverable, excluding those materials that would be protected from disclosure in the courts of this State under statute, Supreme Court Rules or common law, and materials protected from disclosure under 35 Ill. Adm. Code 130.
- b) If the parties cannot agree on the scope of discovery or the time or location of any deposition, the hearing officer has the authority to order discovery or to deny requests for discovery.
- c) All discovery must be completed at least 10 days prior to the scheduled hearing in the proceeding unless the hearing officer orders otherwise.
- d) The hearing officer may, on his or her own motion or on the motion of any party or witness, issue protective orders that deny, limit, condition or regulate discovery to prevent unreasonable expense, or harassment, to expedite resolution of the proceeding, or to protect non-disclosable materials from disclosure consistent with Sections 7 and 7.1 of the Act and 35 Ill. Adm. Code 130.
- e) Unless a claim of privilege is asserted, it is not a ground for objection that the testimony of a deponent or person interrogated will be inadmissible at hearing, if the information sought is reasonably calculated to lead to relevant information. Any appeals of rulings by the hearing officer regarding discovery must be in writing and filed with the Board prior to hearing.
- f) Failure to comply with any order regarding discovery may subject the offending persons to sanctions under Subpart H.

- g) If any person serves any request for discovery or answers to discovery for any improper purpose, such as to harass or to cause unnecessary delay or needless increase in the cost of litigation, or knowingly gives a false answer to discovery questions, the Board, on its own motion or the motion of a party, may impose sanctions under Subpart H.
- h) A party must amend any prior responses to interrogatories, requests for production, or requests for admission if the party learns that the response is in some material respect incomplete or incorrect, and the additional or corrected information has not otherwise been made known to the other parties during the discovery process or in writing.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.618 Admissions

- a) General. All requests to admit must be served upon a party no later than 35 days before hearing. All answers or objections to requests to admit must be served upon the party requesting the admission within 28 days after the service of the request.
- b) Extension of Time. In accordance with Sections 101.522 and 101.610 the hearing officer may extend the time for filing any request, answer, or objection either before or after the expiration of time.
- c) Request to Admit. Any party serving a request to admit in accordance with subsection (d) or (e) must include the following language in the first paragraph of the request. "Failure to respond to the following requests to admit within 28 days may have severe consequences. Failure to respond to the following requests will result in all the facts requested being deemed admitted as true for this proceeding. If you have any questions about this procedure, you should contact the hearing officer assigned to this proceeding or an attorney."
- d) Request for Admission of Fact. A party may serve a written request for admission of the truth of specific statements of fact on any other party.
- e) Request for Admission of Genuineness of Document. A party may serve a written request for admission of the genuineness of documents on any other party. Copies of the document must be served unless the document has already been furnished in the present proceeding.
- f) Admission in the Absence of Denial. Each of the matters of fact and the genuineness of each document of which admission is requested is admitted unless, within 28 days after service, the party to whom the request is directed serves upon the party requesting the admission either a sworn statement denying specifically the matters of which admission is requested or setting forth in detail the reasons

why the party cannot truthfully admit or deny those matters, or written objections on the ground that some or all of the requested admissions are privileged or irrelevant or that the request is otherwise improper in whole or in part. If written objections to a part of the request are made, the remainder of the request must be answered within the period designated in the request. A denial must fairly address the substance of the requested admission.

- g) **Partial Denial or Qualification.** If good faith requires that a party deny a part of a matter for which an admission is requested, or if a part requires qualification, the party must specify the part which is denied or qualified and admit only the remainder.
- h) **Objection.** Any objection to a request or to any answer must be stated with specificity, and will be heard by the hearing officer upon notice and motion of the party making the request.
- i) **Effect of Admission.** Any admission made by a party under a request under this Section is for the purpose of the pending proceeding only. It does not constitute an admission by the party for any other purpose and may not be used against him in any other proceeding.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.620 Interrogatories

- a) Unless ordered otherwise by the hearing officer, a party may serve a maximum of 30 written interrogatories, including subparts, on any other party, no later than 35 days before hearing.
- b) Within 28 days after service, the party to whom the interrogatory is directed must serve the answers and objections, if any, upon the party submitting the interrogatories. Each interrogatory must be answered separately and fully in writing under oath, unless it is objected to. Answers must be signed by the person making them and objections must be signed by the attorney making them or, in the event of an individual representing himself or herself, the individual making them.
- c) Grounds for an objection to an interrogatory must be stated with specificity, and be accompanied by a copy of the interrogatory. Any ground that is not stated in a timely objection is waived unless it results in material prejudice or good cause for the delay is shown.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.622 Subpoenas and Depositions

- a) Upon request by any party to a contested proceeding, the Clerk will issue subpoenas for the attendance of witnesses at a hearing or deposition. Subpoena forms are available at the Board's Chicago office. The person requesting the subpoena is responsible for completing the subpoena and serving it upon the witness.
- b) Service of the subpoena on the witness must be completed no later than 10 days before the date of the required appearance. A copy of the subpoena must be filed with the Clerk and served upon the hearing officer within 7 days after service upon the witness. Failure to serve both the Clerk and the hearing officer will render the subpoena null and void. Service and filing must be in accordance with Subpart C.
- c) Subpoenas may include a command to produce books, papers, documents, or other tangible things designated therein and relevant to the matter under consideration.
- d) The hearing officer, upon motion made promptly and in any event at or before the time specified in the subpoena for compliance, may quash or modify the subpoena if it is unreasonable or irrelevant. The hearing officer will rule upon motions to quash or modify material requested in the subpoena under subsection (c) in accordance with the standards articulated in Section 101.614.
- e) Each witness subpoenaed by a party under this Section is entitled to receive witness fees from that party as provided in Section 4.3 of the Circuit Courts Act. [705 ILCS 35/4.3]
- f) Unless the hearing officer orders otherwise, any witness subpoenaed for a deposition may be required to attend only in the county in which he resides or maintains an office address. In accordance with Supreme Court Rule 206(d), all depositions must be limited to 3 hours in length unless the parties and the non-party deponent by stipulation agree to a longer time frame or unless the hearing officer orders otherwise after a showing of good cause. (See Ill. S. Ct. Amended Rule 206(d).)
- g) Failure of any witness to comply with a subpoena will subject the witness to sanctions under this Part, or the judicial enforcement of the subpoena. The Board may, upon proper motion by the party requesting the subpoena, request the Attorney General to pursue judicial enforcement of the subpoena on behalf of the Board.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.624 Examination of Adverse, Hostile or Unwilling Witnesses

- a) **Adverse Witnesses.** At hearing, upon motion granted by the hearing officer, any party, or any person for whose immediate benefit the proceeding is prosecuted or defended, or any officers, directors, managing agents, or foremen of any party may be called as an adverse witness as allowed by the Code of Civil Procedure. (See Section 2-1102 of the Code of Civil Procedure.) Adverse witnesses may be examined as if under cross-examination. The party calling the adverse witness may rebut the testimony and may impeach the witness.
- b) **Hostile or Unwilling Witnesses.** If the hearing officer determines that any witness is hostile or unwilling, the witness may be examined by the party calling the witness as if under cross-examination.

Section 101.626 Information Produced at Hearing

In accordance with Section 10-40 of the IAPA, the hearing officer will admit evidence that is admissible under the rules of evidence as applied in the civil courts of Illinois, except as otherwise provided in this Part or 35 Ill. Adm. Code Part 105.

- a) **Evidence.** The hearing officer may admit evidence that is material, relevant, and would be relied upon by prudent persons in the conduct of serious affairs, unless the evidence is privileged.
- b) **Admissibility of Evidence.** When the admissibility of evidence depends upon a good faith argument as to the interpretation of substantive law, the hearing officer will admit the evidence.
- c) **Scientific Articles and Treatises.** Relevant scientific or technical articles, treatises, or materials may be introduced into evidence by a party. The materials are subject to refutation or disputation through introduction of documentary evidence or expert testimony.
- d) **Written Testimony.** Written testimony may be introduced by a party in a hearing only if provided to all other parties of record prior to the date of the hearing and only after the opposing parties have had an opportunity to object to the written testimony and to obtain a ruling on the objections prior to its introduction. Written testimony may be introduced by a party only if the persons whose written testimony is introduced are available for cross-examination at hearing.
- e) **Admission of Business Records.** A writing or record, whether in the form of any entry in a book or otherwise made as a memorandum or record of any act, transaction, occurrence, or event, may be admissible as evidence of the act, transaction, occurrence, or event. To be admissible, the writing or record must have been made in the regular course of business, provided it was the regular course of business to make the memorandum or record at the time of the act, transaction, occurrence, or event, or within a reasonable time afterwards. All other circumstances of the making of the writing or record, including lack of

personal knowledge by the entrant or maker, may be admitted to affect the weight of the evidence, but will not affect admissibility. The term "business," as used in this subsection (e), includes businesses, professions, occupations, and callings of every kind.

- f) **Prior Inconsistent Statements.** Prior statements made under oath may be admitted to impeach a witness if the statement is inconsistent with the witness' testimony at hearing.
- g) **Oral and Written Statements.** Oral and written statements from participants may be taken at hearing in accordance with Section 101.628.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.628 Statements from Participants

- a) **Oral Statements.** The hearing officer may permit a participant to make oral statements on the record when time, facilities, and concerns for a clear and concise hearing record so allow. The oral statements must be made under oath and are subject to cross-examination. (See Sections 101.110 and 101.114)
- b) **Written Statements.** Any participant may submit written statements relevant to the subject matter at any time prior to hearing or at hearing. Participants submitting such a statement will be subject to cross-examination by any party. Written statements submitted without the availability of cross-examination will be treated as public comment in accordance with subsection (c) and will be afforded lesser weight than evidence subject to cross-examination.
- c) **Public Comments or Amicus Curiae Briefs.** Oral public comment may be made on the record at a hearing and is not subject to cross-examination. Additionally, participants may file written public comments subject to the requirements of this Section and the hearing officer's schedule for completion of the record. The Board also allows for the filing of amicus curiae briefs by non-party participants. Amicus curiae briefs will be allowed in accordance with Section 101.110.
 - 1) **Written public comments** must be filed within 14 days after the close of the last hearing unless the hearing officer specifies a different date for submission of post-hearing comments. However, all public comments must be filed with the Board no later than 30 days before the decision date, unless the hearing officer orders otherwise to prevent material prejudice. Consistent with the burden of proof in a proceeding, the hearing officer may provide for differing filing deadlines with respect to post-hearing comments by different persons. Under hearing officer order, rebuttal public comments may be submitted.

- 2) All public comments must present arguments or comments based on evidence contained in the record. The comments may also present legal argument citing legal authorities.
- 3) Comments must be filed with the Board. Comments will be distributed to parties and the hearing officer by the Clerk's office.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.630 Official Notice

Official notice may be taken of all facts of which judicial notice may be taken and of other facts within the specialized knowledge and experience of the Board.

Section 101.632 Site Visits

Upon the request of any party or the Board's own motion, the Board may conduct a site visit to establish a more comprehensive record. If the site visit is part of an adjudicatory proceeding, the Board will notify all parties in advance.

SUBPART G: ORAL ARGUMENT

Section 101.700 Oral Argument

- a) The Board may hear oral argument upon written motion of a party or the Board's own motion. The oral argument will be transcribed by a stenographer provided by the Board and become part of the record of the proceedings before the Board. The purpose of oral argument is to address legal questions. Oral argument is not intended to address new facts.
- b) Motions for oral argument must contain arguments supporting the grant of the motion for oral argument. In considering a motion for oral argument, the Board will consider, but is not limited to considering, the uniqueness of the issue or proceeding and whether the issue or proceeding involves a conflict of law.
- c) In any proceeding with a statutory decision deadline, the Board will deny the request for oral argument if there is insufficient time to schedule oral argument and allow time for the Board to issue its decision.
- d) If the Board grants the motion for oral argument, it will issue an order setting forth a schedule for oral argument that may include a briefing schedule. The brief will be limited to the issues for which oral argument was granted.

SUBPART H: SANCTIONS

Section 101.800 Sanctions for Failure to Comply with Procedural Rules, Board Orders, or Hearing Officer Orders

- a) If any person unreasonably fails to comply with any provision of 35 Ill. Adm. Code 101 through 130 or any order entered by the Board or the hearing officer, including any subpoena issued by the Board, the Board may order sanctions. The Board may order sanctions on its own motion, or in response to a motion by a party.
- b) Sanctions include the following:
 - 1) Further proceedings may be stayed until the order or rules are complied with, except in proceedings with a statutory decision deadline. Proceedings with a statutory decision deadline may be dismissed prior to the date on which decision is due;
 - 2) The offending person may be barred from filing any other pleading or other document relating to any issue to which the refusal or failure relates;
 - 3) The offending person may be barred from maintaining any particular claim, counterclaim, third-party complaint, or defense relating to that issue;
 - 4) As to claims or defenses asserted in any pleading or other document to which that issue is material, a judgment by default may be entered against the offending person or the proceeding may be dismissed with or without prejudice;
 - 5) Any portion of the offending person's pleadings or other documents relating to that issue may be stricken and, if appropriate, judgment may be entered as to that issue; and
 - 6) The witness may be barred from testifying concerning that issue.
- c) In deciding what sanction to impose the Board will consider factors including: the relative severity of the refusal or failure to comply; the past history of the proceeding; the degree to which the proceeding has been delayed or prejudiced; and the existence or absence of bad faith on the part of the offending party or person.

Section 101.802 Abuse of Discovery Procedures

The Board or the hearing officer may order that information obtained through abuse of discovery procedures be suppressed. If a person willfully obtains or attempts to obtain information by an improper discovery method, willfully obtains or attempts to obtain information to which he is not

entitled, or otherwise abuses discovery rules, the Board or hearing officer may enter any order provided for in this Part.

SUBPART I: REVIEW OF FINAL BOARD OPINIONS AND ORDERS

Section 101.902 Motions for Reconsideration

In ruling upon a motion for reconsideration, the Board will consider factors including new evidence, or a change in the law, to conclude that the Board's decision was in error. (See also Section 101.520) A motion for reconsideration of a final Board order is not a prerequisite for the appeal of the final Board order.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.904 Relief from Final Opinions and Orders

- a) Upon its own motion or motion of any party, the Board may correct clerical mistakes in orders or other parts of the record and errors therein arising from oversight or omission before the appeal is docketed in the appellate court. While the appeal is pending, the mistakes may be corrected only with permission of the appellate court. Any corrected order will be mailed to all parties and participants in that proceeding.
- b) On written motion, the Board may relieve a party from a final order entered in a contested proceeding, for the following:
 - 1) Newly discovered evidence that existed at the time of hearing and that by due diligence could not have been timely discovered;
 - 2) Fraud (whether intrinsic or extrinsic), misrepresentation, or other misconduct of an adverse party; or
 - 3) Void order, such as an order based upon jurisdictional defects.
- c) A motion under this Section does not affect the finality of a Board order or suspend the operation of a Board order. The motion must be filed in the same proceeding in which the order was entered but is not a continuation of the proceeding. The motion must be supported by oath or affidavit or other appropriate showing as to matters not of record. All parties or participants in the proceeding must be notified by the movant as provided by Section 101.304.
- d) A motion under subsection (b) must be filed with the Board within one year after entry of the order except that a motion under subsection (b)(3) must be filed within a reasonable time after entry of the order.

- e) Any response to a motion under this Section must be filed within 14 days after the filing of the motion.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.906 Judicial Review of Board Orders

- a) Under Sections 29 and 41 of the Act and Supreme Court Rule 335, judicial review of final Board orders is available from the appellate court. However, under Section 11-60 of the Property Tax Code [35 ILCS 200/11-60], judicial review of final Board orders in tax certification proceedings is available from the circuit court.
- b) For purposes of judicial review, a final Board order is appealable as of the date of service of the final order upon the appealing person (see Section 101.300(d)).
- c) The procedure for stay of any final Board order during appeal will be as provided in Rule 335 of the Rules of the Supreme Court of Illinois (Ill. S. Ct. Rule 335).

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.908 Interlocutory Appeal

Upon motion of any party the Board may consider an interlocutory appeal in accordance with Supreme Court Rule 308. (Ill. S. Ct. Rule 308).

SUBPART J: ELECTRONIC FILING AND E-MAIL SERVICE

Section 101.1000 Electronic Filing and E-Mail Service

- a) The Board provides the opportunity to file and access documents electronically through its Clerk's Office On-Line (COOL). COOL is located on the Board's website (www.ipcb.state.il.us). The Board has taken steps designed to ensure the integrity and security of COOL in accordance with State policies developed under the Electronic Commerce Security Act. [5 ILCS 175]
- b) To file an electronic document with the Board, a person must upload the document on COOL. Electronic filing is not accomplished by sending a document to the e-mail address of the Clerk or hearing officer.
- c) Except as provided in Section 101.302(h)(3), (h)(4), and (j) and Section 101.1050, all documents must be filed through COOL. However, if filing through COOL is not reasonably practicable, the Board, the hearing officer, or the Clerk may grant permission to file in paper.

- d) Generally, the Clerk's Office will not accept paper documents for filing; however, the Clerk's Office will convert paper-filed documents into electronic documents and place them on COOL, when permission to file a paper document is granted under subsection (c).
- e) All documents filed with the Board may be served by e-mail except for enforcement complaints, administrative citations, and EMSA statements of deficiency. (See Section 101.304(c) and Section 101.1060.)

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1010 Electronic Filing Authorization and Signatures

- a) A person seeking to upload a document on COOL for filing must have been issued a State of Illinois digital signature certificate under Section 15-310 of the Electronic Commerce Security Act. (See 5 ILCS 175/15-310.) A link to the subscriber agreement and application for a State of Illinois digital signature certificate is available through COOL.
 - 1) Maintaining digital signature confidentiality is the responsibility of the holder of the digital signature certificate. The certificate holder is responsible for any document electronically filed by anyone using his or her digital signature certificate.
 - 2) The digital signature certificate holder is responsible for keeping his or her contact information current.
- b) Each electronic document uploaded on COOL for filing must bear a facsimile electronic signature (i.e., scanned image of original pen-and-ink signature) or typographical electronic signature (i.e., "/s/ typed name") of the person authorizing the filing (e.g., attorney, participant, pro se party). However, if this electronic signature is absent, the document will be deemed to have been signed by the holder of the digital signature certificate used to upload the document and the certificate holder will be deemed to have authorized the filing. (See 5 ILCS 175/5-120.) To file an electronic document on behalf of another person in an adjudicatory proceeding, an electronic signature of a licensed and registered attorney is required. (See Section 101.400(a).)
- c) If an electronic document or portion thereof requires the signatures of any persons in addition to those specified in subsection (b) (e.g., settlement agreement, witness' affidavit), the person authorizing the filing must:
 - 1) Confirm that the additional persons have approved the document or corresponding portion thereof and obtain their original pen-and-ink signatures before the document is uploaded on COOL for filing;

- 2) Ensure that the document or corresponding portion thereof bears the facsimile electronic signatures of, and indicates the identity of, the additional persons;
- 3) Upload the document on COOL as a scanned image containing the necessary signatures; and
- 4) Retain the paper original of the document, including the original pen-and-ink signatures of the additional persons, for one year after the later of the following:
 - A) The date on which the time period expires for appealing the final order of the Board; or
 - B) If the final order of the Board is appealed, the date on which the time period expires for seeking any further review in the courts.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1020 Filing Electronic Documents

- a) **COOL.** To file an electronic document through COOL, the document must first be uploaded on COOL.
- b) **Digital Signature Certificate.** Uploading a document on COOL requires a valid State of Illinois digital signature certificate.
- c) **Uploading Hours.** Electronic documents may be uploaded on COOL 24 hours per day, every day.
- d) **E-Mail Receipt.** Uploading a document on COOL will generate an e-mail receipt for the digital signature certificate holder. The receipt will verify the date and time when the document was uploaded on COOL. -
- e) **Time of Filing.** Subject to subsection (f), an electronic document uploaded on COOL will be considered filed as of the date and time specified on the e-mail receipt generated under subsection (d) except that:
 - 1) A document uploaded on a Saturday or Sunday, on a national or State legal holiday, or after 4:30 p.m. on a weekday is deemed filed the next business day.
 - 2) A document uploaded without one or more portions of the filing (e.g., oversized exhibit; trade secret or non-disclosable information; copyrighted document proposed for incorporation by reference in a rule) or without a

required oath, affidavit, notarization, signature, or filing fee is considered filed:

- A) On the date that the Clerk receives the document's last missing item; or
 - B) On the postmark date of the document's last missing item if that item was sent by U.S. Mail, was received after the date of a filing deadline, and has a postmark date that precedes or is the same as the deadline date.
- 3) A document consisting of multiple electronic files is considered filed as of the date and time specified on the e-mail receipt generated under subsection (d) for the last file uploaded to complete the document.
- f) Review by the Clerk. The Clerk will review electronically each document uploaded on COOL, validate the proceeding information provided, and accept or reject the document for filing.
- 1) If the Clerk accepts an uploaded document, the Clerk's Office will e-mail a notice of acceptance to the digital signature certificate holder, indicating that the filed document may be viewed on COOL.
 - 2) If the Clerk rejects an uploaded document, the Clerk's Office will e-mail a notice of rejection to the digital signature certificate holder. The Clerk may reject an uploaded document because the document is prohibited from being filed electronically under Section 101.302(h)(3) or (h)(4), the document fails to comply with file size or naming requirements of Section 101.1030(c), or the document is corrupted or otherwise cannot be readily opened. If an uploaded document is rejected by the Clerk, the Board may, upon good cause shown, enter an order deeming the document filed as of the date and time specified when the document was uploaded on COOL, subject to subsections (e)(1) through (e)(3).
- g) Technical Failure. If an electronic document is not uploaded, or is materially delayed in uploading, on COOL due to a technical failure, the Board may, upon good cause shown, enter an order deeming the document uploaded under subsection (d) as of the date and time of the first attempted uploading. "Technical failure" as used in this subsection is limited to a system outage of COOL or other malfunction of the hardware, software, or telecommunications facilities of the Board or the Board's electronic filing provider. "Technical failure", therefore, does not include any malfunction of the equipment used by the person authorizing the filing or the digital signature certificate holder.
- h) Clerk's Electronic Stamp. An electronic document uploaded on COOL and accepted by the Clerk for filing will be endorsed by the Clerk with a file stamp

setting forth the date of filing. This file stamp will be merged with the electronic document and visible when the document is viewed on COOL. Electronically filed documents so endorsed have the same legal effect as paper documents file-stamped by the Clerk conventionally in accordance with Section 101.300(b).

- i) **Decision Deadlines.** For purposes of Board decision deadlines, the decision period does not begin until the date on which the electronic document constituting the initial filing is considered filed under this Section.
- j) **Filing Deadlines.** The electronic filing of a document does not alter any applicable filing deadlines.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1030 Form of Electronic Documents for Filing

- a) In addition to complying with the formatting requirements of Section 101.302(g) and (j), electronic documents uploaded on COOL for filing must be in one of the following electronic formats:
 - 1) Adobe Portable Document Format (PDF), version 2.0 or greater;
 - 2) Microsoft Word for Windows, version 6.0 or greater;
 - 3) Corel WordPerfect for Windows, version 6.0 or greater; or
 - 4) Microsoft Excel for Windows, version 4.0 or greater.
- b) Generally, electronic documents filed in accordance with this Subpart will be posted to COOL by the Clerk's Office in text-searchable Adobe PDF. When practicable, persons should:
 - 1) Upload their electronic documents on COOL in text-searchable Adobe PDF; and
 - 2) Convert their electronic documents to a text-searchable Adobe PDF directly from the program used to create the document, rather than from a scanned image of the paper document. -
- c) No single electronic file uploaded on COOL, whether constituting all or part of an electronic document, may contain more than 10 megabytes (MB) of data. To comply with this requirement, an electronic document may be divided into parts and submitted as multiple electronic files, each file being 10 MB or less. The person authorizing the filing is responsible for dividing the document into appropriately-sized files and naming each file to reflect its place within the electronic document.

- d) Multiple electronic documents, whether for the same proceeding or different proceedings, must be uploaded separately on COOL and, therefore, must not be combined into a single electronic file for filing through COOL.
- e) Electronic documents may contain links to material external to the filed document. However, links to external material are for convenience purposes only. The external material behind the link is not considered part of the filing or the record of the proceeding in which the document was filed.
- f) All documents uploaded on COOL must be free of viruses or other harmful processes. If an electronic document containing a virus or other harmful process is uploaded on COOL, the Board may, consistent with Section 101.800(b) and (c), impose sanctions, including barring the document from being filed in any manner and barring the person authorizing the filing or the digital signature certificate holder from any further electronic filing through COOL.
- g) Documents filed under Section 101.302(h)(2) must:
 - 1) Include bookmarks, immediately viewable when the document is opened, to individual documents in the same order as they appear in the corresponding Table of Contents to facilitate navigation and location of specific contents within the document; and
 - 2) Have pagination on each document in the top right corner of each page.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1040 Filing Fees

- a) Filing fees are specified in Section 101.302(e). The Clerk's Office imposes no additional fee to file a document electronically.
- b) A person seeking to file an electronic document that requires a filing fee must either:
 - 1) Pay the fee with a valid credit card through COOL when the document is uploaded on COOL; or
 - 2) Deliver payment to the Clerk's Office in the form of government voucher, money order, or check made payable to the Illinois Pollution Control Board.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1050 Documents Required in Paper or Excluded from Electronic Filing

- a) A document containing information claimed or determined to be a trade secret, or other non-disclosable information under 35 Ill. Adm. Code 130, is prohibited from being filed electronically and must instead be filed only in paper under Section 101.302(h)(3). The version of the document that is redacted under 35 Ill. Adm. Code 130 must be filed through COOL.
- b) If a rulemaking proposal contains a document that is protected by copyright law (17 USC 101 *et seq.*) and proposed under Section 5-75 of the IAPA [5 ILCS 100/5-75] to be incorporated by reference, that copyrighted document is prohibited from being filed electronically and must instead be filed only in paper under Section 101.302(h)(4). The remainder of the rulemaking proposal must be filed through COOL.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1060 E-Mail Service

- a) Except as provided in subsections (b) and (c), a person required to serve a document may serve the document by e-mail, in lieu of serving a paper document, if the recipient has consented to e-mail service in the proceeding and has not revoked the consent. (See Section 101.1070.) To serve a document by e-mail, it is not necessary to electronically file the document or to obtain a State of Illinois digital signature certificate.
- b) Service of enforcement complaints and EMSA statements of deficiency on a respondent must be made personally, by U.S. Mail with a recipient's signature recorded, or by a third-party commercial carrier with a recipient's signature recorded. (See Section 101.304(c)(2).)
- c) Service of administrative citations must be made as required under 35 Ill. Adm. Code 108.
- d) A person required to serve a document on the hearing officer must serve the hearing officer by sending the document to the hearing officer's e-mail address in lieu of serving a paper document upon the hearing officer if the person has the capability of serving the document by e-mail.
- e) When a document is served by e-mail, documentation of service must be filed with the Clerk and served on all persons entitled to service in that proceeding. A sample form of affidavit or certificate of e-mail service is available in Appendix H. An affidavit or certificate of e-mail service must include the following:
 - 1) The e-mail address of the recipient and the person authorizing the filing;
 - 2) The number of pages in the e-mail transmission;

- 3) A statement that the document was served by e-mail; and
- 4) The date of the e-mail transmission and the time by when it took place.
- f) If any computer malfunction precludes the e-mail service of a document, the person authorizing the filing must promptly serve the document in paper under 101.304(c).
- g) Except for final adjudicatory orders of the Board, which the Clerk's Office serves in paper by certified mail, the Clerk's Office will serve Board orders and hearing officer orders by e-mail, in lieu of serving paper documents, if the recipient has consented to e-mail service in the proceeding and has not revoked the consent. (See Section 101.1070.) The Clerk will record the date and time of e-mail service, consistent with subsection (e).

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1070 Consenting to Receipt of E-Mail Service

- a) In any proceeding, a person consents to e-mail service of documents in lieu of receiving paper documents by:
 - 1) Filing a "Consent to Receipt of E-Mail Service" (see sample form of consent in Appendix I);
 - 2) Providing the hearing officer, during a hearing or conference, with an e-mail address that is designated for receiving service;
 - 3) Filing an attorney's appearance; or
 - 4) Appearing on a notice list or service list and providing the Clerk's Office with an e-mail address that is designated for receiving service.
- b) At any time during a proceeding, consent to e-mail service may be provided as set forth in subsection (a). To accept e-mail service, it is not necessary to obtain a State of Illinois digital signature certificate.
- c) A person's consent to receiving e-mail service may be revoked by that person at any time during the proceeding upon the person's filing of a notice of the revocation with the Clerk's Office. However, an attorney who filed an appearance must not revoke consent unless the appearance is withdrawn.
- d) Upon a change in the e-mail address of a recipient of e-mail service, the recipient must notify the Clerk's Office of the e-mail address change for each pending proceeding in which the person has consented to e-mail service.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

APPENDIX A

Captions

ILLUSTRATION A Enforcement Case

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

PEOPLE OF THE STATE OF)	
ILLINOIS,)	
)	
Complainant,)	
)	
v.	)	PCB xx-xxx
	)	(Enforcement-X)
W. R. JONES Co.,)	
)	
Respondent.)	

ILLUSTRATION B Citizen's Enforcement Case

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

JOHN DOE,)	
)	
Complainant,)	
)	
v.	)	PCB xx-xxx
	)	(Enforcement-X)
W. R. JONES Co.,)	
)	
Respondent.)	

ILLUSTRATION C Variance

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

W.R. WATER CO.,)	
)	
Petitioner,)	
)	
v.	)	PCB xx-xxx

	)	(Variance-X)
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

ILLUSTRATION D Adjusted Standard Petition

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	
PETITION OF ABC COMPANY	)	AS xx-xxx
FOR AN ADJUSTED STANDARD	)	(Adjusted Standard-X)
FROM 35 Ill. Adm. Code XXX.XXX)	

ILLUSTRATION E Joint Petition for an Adjusted Standard

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	
PETITION OF ABC COMPANY AND	)	AS xx-xxx
THE ILLINOIS ENVIRONMENTAL	)	(Adjusted Standard-X)
PROTECTION AGENCY FOR)	
ADJUSTED STANDARD FROM)	
35 Ill. Adm. Code XXX.XXX)	

ILLUSTRATION F Permit Appeal

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

GENERAL COMPANY,)	
)	
Petitioner,)	
)	
v.	)	PCB xx-xxx
	)	(Permit Appeal-X)
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

ILLUSTRATION G Underground Storage Tank Appeal

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

GENERAL COMPANY,)	
)	
Petitioner,)	
)	
v.	)	PCB xx-xxx
	)	(UST Fund Appeal)
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

GENERAL COMPANY,)	
)	
Petitioner,)	
)	
v.	)	PCB xx-xxx
	)	(UST Appeal)
OFFICE OF THE STATE)	
FIRE MARSHAL,)	
)	
Respondent.)	

ILLUSTRATION H Pollution Control Facility Siting Appeal

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

GENERAL COMPANY,)	
)	
Petitioner,)	
)	
v.	)	PCB xx-xxx
	)	(Pollution Control Facility Siting Appeal)
)	
XXX COUNTY AND ABC DISPOSAL)	
COMPANY,)	
)	

Respondents.)

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

ABC DISPOSAL COMPANY,)	
)	
Petitioner,)	
)	
v.	)	PCB xx-xxx
	)	(Pollution Control Facility Siting Appeal)
)	
XXX COUNTY,)	
)	
Respondent.)	

ILLUSTRATION I Administrative Citation

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

COUNTY OF COOK,)	
)	
Complainant,)	
)	
v.	)	AC xx-xxx
	)	IEPA or County Number
ABC DISPOSAL AND	)	(Administrative Citation)
RECYCLING, INC.,)	
)	
Respondent.)	

Section 101.ILLUSTRATION J Administrative Citation Under Section 23.1 of the Public Water Supply Operations Act

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Complainant,)	
)	
v.	)	AC xx-xxx
	)	IEPA Number

JOHN SMITH,) (Administrative Citation)
)
 Respondent.)

(Source: Former Illustration J renumbered to Illustration K and new Illustration J added at 39 Ill. Reg. 12848, effective September 8, 2015)

Section 101.ILLUSTRATION L Site-specific Rulemaking

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
 PROPOSED SITE SPECIFIC WATER) Rxx-xxx
 POLLUTION REGULATIONS) (Site-Specific Rulemaking-X)
 APPLICABLE TO XYZ)
 UTILITIES COMPANY OF ILLINOIS)
 DISCHARGE TO XYZ CREEK:)
 35 Ill. Adm. Code)

BOARD NOTE: The Board notes that all docket numbers consist of letter(s) followed by two numbers. The first two digit number is the fiscal year the matter was filed. Then the second number is the sequential number for that type of filing the Board has received that year. Persons making filings are not responsible for the Board docket number on the original filing. The Clerk of the Board will assign the appropriate docket number when the matter is filed. All filings in a matter that has been assigned a docket number must contain a docket number located as indicated on the examples above. The Board will also be designating its opinion and orders with the type of case and media involved in the matter. Where the above examples have the type of case followed by "X", the Board will, for example if the case is dealing with a variance from certain water regulations, put the media, water, after variance to become "Variance-Water". Again, persons making filings need not place this on original filings. However, all filings in a matter that has been assigned the media must indicate that media in the location as in the above examples. Where there are specific procedural rules developed for specific types of cases, as in a "UST Appeal", persons making filings must follow those examples.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

APPENDIX B Appearance Form

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Applicable Caption)
 (see Appendix A)) docket number

)

APPEARANCE

I hereby file my appearance in this proceeding, on behalf of
ABC Company.

Attorney's Name

Name of Attorney and Firm
Address
Telephone Number

APPENDIX C
Withdrawal of Appearance Form

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Applicable Caption
(see Appendix A)

)
)
)
)

docket number

NOTICE OF WITHDRAWAL OF APPEARANCE

I hereby give notice of withdrawal of my appearance as
representative of ABC Company in this proceeding.

Attorney's Name

Name of Attorney and Firm
Address
Telephone Number

APPENDIX D
Notice of Filing

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Applicable Caption
(see Appendix A)

)
)
)
)
)

docket number

NOTICE OF FILING

To: (List all persons served.)

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Pollution Control Board the [specify what document was filed] of [name of persons filing the document], a copy of which is herewith served upon you.

Name of Attorney or Other Representative

Date

Name

Address

Telephone Number

Section 101.APPENDIX E Affidavit or Certificate of Service

Section 101.ILLUSTRATION A Service by Non-Attorney

AFFIDAVIT OF SERVICE

I, the undersigned, on oath [or affirmation] state that I have served on the date of _____, the attached [describe document served] upon the following persons by [describe method of service, e.g., depositing the document in a U.S. Postal Service mailbox or delivering the document to a third-party commercial carrier], by the time of _____, with proper postage or delivery charges prepaid:

[list persons served and the respective addresses at which they were served]

[signature]

Notary Seal

SUBSCRIBED AND SWORN TO BEFORE ME this _____ day of _____, 20 ____.

Notary Public

(Source: Amended at 39 Ill. Reg. 12848, effective September 8, 2015)

Section 101.ILLUSTRATION B Service by Attorney

CERTIFICATE OF SERVICE

I, the undersigned, certify that I have served on the date of _____ the attached [describe document served] upon the following persons by [describe method of service, e.g., depositing the document in a U.S. Postal Service mailbox or delivering the document to a third-party commercial carrier], by the time of _____, with proper postage or delivery charges prepaid:

[list persons served and the respective addresses at which they were served]

[signature]

[date]

(Source: Amended at 39 Ill. Reg. 12848, effective September 8, 2015)

101.APPENDIX F Notice of Withdrawal (Repealed)

(Source: Repealed 29 Ill. Reg. 8743, effective June 8, 2005)

101.APPENDIX G Comparison of Former and Current Rules (Repealed)

(Source: Repealed 29 Ill. Reg. 8743, effective June 8, 2005)

Section 101.APPENDIX H Affidavit or Certificate of E-Mail Service

Section 101.ILLUSTRATION A E-Mail Service by Non-Attorney

AFFIDAVIT OF E-MAIL SERVICE

I, the undersigned, on oath [or affirmation] state the following:

That I have served the attached [describe document served] by e-mail upon [identify person served] at the e-mail address of [identify e-mail address of person served].

That my e-mail address is _____.

That the number of pages in the e-mail transmission is ____.

That the e-mail transmission took place before 5:00 p.m. on the date of _____.

[signature]

Notary Seal

SUBSCRIBED AND SWORN TO BEFORE ME this ____ day of _____, 20__.

Notary Public

(Source: Added at 39 Ill. Reg. 2276, effective January 27, 2015)

Section 101.ILLUSTRATION B E-Mail Service by Attorney

CERTIFICATE OF E-MAIL SERVICE

I, the undersigned, on oath [or affirmation] state the following:

That I have served the attached [describe document served] by e-mail upon [identify person served] at the e-mail address of [identify e-mail address of person served].

That my e-mail address is _____.

That the number of pages in the e-mail transmission is ____.

That the e-mail transmission took place before 5:00 p.m. on the date of _____.

[signature]

[date]

(Source: Added at 39 Ill. Reg. 2276, effective January 27, 2015)

Section 101.APPENDIX I Consent to Receipt of E-Mail Service

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

)	
Applicable Caption)	
(see Appendix A)	)	docket number
)	

I, the undersigned, authorize the service of documents on me by e-mail in lieu of receiving paper documents in the above-captioned proceeding. My e-mail address to receive service is as follows: _____.

[signature]

[date]

(Source: Added at 39 Ill. Reg. 2276, effective January 27, 2015)

Carter, Sally

Subject: FW: Follow-up Discussion of IEPA's Draft PSD Rule
Location: R5Metcalf-ConfRm-R1819/R5-Metcalf-18th-Floor

Start: Tue 1/16/2018 2:00 PM
End: Tue 1/16/2018 3:00 PM
Show Time As: Tentative

Recurrence: (none)

Meeting Status: Not yet responded

Organizer: Ogulei, David

-----Original Appointment-----

From: Ogulei, David [mailto:Ogulei.David@epa.gov]
Sent: Tuesday, December 19, 2017 4:50 PM
To: Ogulei, David; Portanova, Sam; Barton, Kasey; Carter, Sally; Romaine, Chris
Cc: Damico, Genevieve
Subject: [External] Follow-up Discussion of IEPA's Draft PSD Rule
When: Tuesday, January 16, 2018 2:00 PM-3:00 PM (UTC-06:00) Central Time (US & Canada).
Where: R5Metcalf-ConfRm-R1819/R5-Metcalf-18th-Floor

Schnepp, Jason

From: Schnepp, Jason
Sent: Tuesday, December 19, 2017 5:54 PM
To: Ogulei, David
Subject: Accepted: Follow-up Discussion of IEPA's Draft PSD Rule

Schnepp, Jason

From: Schnepp, Jason
Sent: Tuesday, November 14, 2017 1:55 PM
To: Ogulei, David
Subject: call will go on as scheduled

Schnepp, Jason

Subject: [External] Discuss IEPA's PSD Draft Rule
Location: R5Metcalf-ConfRm-R1820/R5-Metcalf-18th-Floor

Start: Tue 11/14/2017 2:00 PM
End: Tue 11/14/2017 3:30 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Ogulei, David
Resources: R5Metcalf-ConfRm-R1820/R5-Metcalf-18th-Floor

IEPA will call USEPA at **312-886-0987**.

Romaine, Chris

Subject: [External] Discuss IEPA's PSD Draft Rule
Location: R5Metcalf-ConfRm-R1820/R5-Metcalf---18th-Floor
Start: Tue 11/14/2017 2:00 PM
End: Tue 11/14/2017 3:30 PM
Recurrence: (none)
Meeting Status: Accepted
Organizer: Ogulei, David
Resources: R5Metcalf-ConfRm-R1820/R5-Metcalf---18th-Floor

IEPA will call USEPA at **312-886-0987**.

Public Act 099-0463

SB1672 Enrolled

LRB099 09565 MGM 29774 b

AN ACT concerning safety.

**Be it enacted by the People of the State of Illinois,
represented in the General Assembly:**

Section 5. The Environmental Protection Act is amended by changing Sections 9.1, 9.12, 39, 40, and 41 and by adding Sections 3.298, 3.363, and 40.3 as follows:

(415 ILCS 5/3.298 new)

Sec. 3.298. Nonattainment new source review (NA NSR) permit. "Nonattainment New Source Review permit" or "NA NSR permit" means a permit or a portion of a permit for a new major source or major modification that is issued by the Illinois Environmental Protection Agency under the construction permit program pursuant to subsection (c) of Section 9.1 that has been approved by the United States Environmental Protection Agency and incorporated into the Illinois State Implementation Plan to implement the requirements of Section 173 of the Clean Air Act and 40 CFR 51.165.

(415 ILCS 5/3.363 new)

Sec. 3.363. Prevention of significant deterioration (PSD) permit. "Prevention of Significant Deterioration permit" or "PSD permit" means a permit or the portion of a permit for a new major source or major modification that is issued by the Illinois Environmental Protection Agency under the construction permit program pursuant to subsection (c) of Section 9.1 that has been approved by the United States Environmental Protection Agency and incorporated into the Illinois State Implementation Plan to implement the requirements of Section 165 of the Clean Air Act and 40 CFR 51.166.

(415 ILCS 5/9.1) (from Ch. 111 1/2, par. 1009.1)

Sec. 9.1. (a) The General Assembly finds that the federal Clean Air Act, as amended, and regulations adopted pursuant thereto establish complex and detailed provisions for State-federal cooperation in the field of air pollution control, provide for a Prevention of Significant Deterioration program to regulate the issuance of preconstruction permits to insure that economic growth will occur in a manner consistent with the preservation of existing clean air resources, and also provide for plan requirements for nonattainment areas to regulate the construction, modification and operation of sources of air pollution to insure that economic growth will occur in a manner consistent with the goal of achieving the national ambient air quality standards, and that the General Assembly cannot conveniently or advantageously set forth in this Act all the requirements of such federal Act or all regulations which may be established thereunder.

It is the purpose of this Section to avoid the existence of duplicative, overlapping or conflicting State and federal regulatory systems.

(b) The provisions of Section 111 of the federal Clean Air Act (42 USC 7411), as amended, relating to standards of performance for new stationary sources, and Section 112 of the federal Clean Air Act (42 USC 7412), as amended, relating to the establishment of national emission standards for hazardous air pollutants are applicable in this State and are enforceable under this Act. Any such enforcement shall be stayed consistent with any stay granted in any federal judicial action to review such standards. Enforcement shall be consistent with the results of any such judicial review.

(c) The Board ~~shall~~ may adopt regulations establishing permit programs for PSD and NA NSR permits meeting the respective requirements of Sections 165 and 173 of the Clean Air Act (42 USC 7475 and 42 USC 7503) as amended. The Agency may adopt procedures for the administration of such programs.

The regulations adopted by the Board to establish a PSD permit program shall incorporate by reference, pursuant to

subsection (a) of Section 5-75 of the Illinois Administrative Procedure Act, the provisions of 40 CFR 52.21, except for the following subparts: (a)(1) Plan disapproval, (g) Public participation, (s) Environmental impact statements, (t) Disputed permits or redesignations and (u) Delegation of authority; the Board may adopt more stringent or additional provisions to the extent it deems appropriate. To the extent that the provisions of 40 CFR 52.21 provide for the Administrator to make various determinations and to take certain actions, these provisions shall be modified to indicate the Agency if appropriate. Nothing in this subsection shall be construed to limit the right of any person to submit a proposal to the Board or the authority of the Board to adopt elements of a PSD permit program that are more stringent than those contained in 40 CFR 52.21, pursuant to the rulemaking requirements of Title VII of this Act and Section 5-35 of the Illinois Administrative Procedure Act.

(d) No person shall:

(1) violate any provisions of Sections 111, 112, 165 or 173 of the Clean Air Act, as now or hereafter amended, or federal regulations adopted pursuant thereto; or

(2) construct, install, modify or operate any equipment, building, facility, source or installation which is subject to regulation under Sections 111, 112, 165 or 173 of the Clean Air Act, as now or hereafter amended, except in compliance with the requirements of such Sections and federal regulations adopted pursuant thereto, and no such action shall be undertaken (A) without a permit granted by the Agency whenever a permit is required pursuant to (i) this Act or Board regulations or (ii) Section 111, 112, 165, or 173 of the Clean Air Act or federal regulations adopted pursuant thereto or (B) in violation of any conditions imposed by such permit. The issuance or any denial of such a PSD permit or any conditions imposed therein in such a permit shall be reviewable by the Board in accordance with Section 40.3 40 of this Act. Other permits addressed in this subsection (d) shall be reviewable by the Board in accordance with Section 40 of this Act.

(e) The Board shall exempt from regulation under the State Implementation Plan for ozone the volatile organic compounds which have been determined by the U.S. Environmental Protection Agency to be exempt from regulation under state implementation plans for ozone due to negligible photochemical reactivity. In accordance with subsection (b) of Section 7.2, the Board shall adopt regulations identical in substance to the U.S. Environmental Protection Agency exemptions or deletion of exemptions published in policy statements on the control of volatile organic compounds in the Federal Register by amending the list of exemptions to the Board's definition of volatile organic material found at 35 Ill. Adm. Code Part 211. The provisions and requirements of Title VII of this Act shall not apply to regulations adopted under this subsection. Section 5-35 of the Illinois Administrative Procedure Act, relating to procedures for rulemaking, does not apply to regulations adopted under this subsection. However, the Board shall provide for notice, a hearing if required by the U.S. Environmental Protection Agency, and public comment before adopted rules are filed with the Secretary of State. The Board may consolidate into a single rulemaking under this subsection all such federal policy statements published in the Federal Register within a period of time not to exceed 6 months.

(f) (Blank).

(Source: P.A. 97-95, eff. 7-12-11; 98-284, eff. 8-9-13.)

(415 ILCS 5/9.12)

Sec. 9.12. Construction permit fees for air pollution sources.

(a) An applicant for a new or revised air pollution construction permit shall pay a fee, as established in this Section, to the Agency at the time that he or she submits the application for a construction permit. Except as set forth below, the fee for each activity or category listed in this Section is separate and is cumulative with any other applicable fee listed in this Section.

(b) The fee amounts in this subsection (b) apply to construction permit applications relating to (i) a source subject to Section 39.5 of this Act (the Clean Air Act Permit Program); (ii) a source that, upon issuance of the requested construction permit, will become a major source subject to

Section 39.5; or (iii) a source that has or will require a federally enforceable State operating permit limiting its potential to emit.

(1) Base fees for each construction permit application shall be assessed as follows:

(A) If the construction permit application relates to one or more new emission units or to a combination of new and modified emission units, a fee of \$4,000 for the first new emission unit and a fee of \$1,000 for each additional new or modified emission unit; provided that the total base fee under this subdivision (A) shall not exceed \$10,000.

(B) If the construction permit application relates to one or more modified emission units but not to any new emission unit, a fee of \$2,000 for the first modified emission unit and a fee of \$1,000 for each additional modified emission unit; provided that the total base fee under this subdivision (B) shall not exceed \$5,000.

(2) Supplemental fees for each construction permit application shall be assessed as follows:

(A) If, based on the construction permit application, the source will be, but is not currently, subject to Section 39.5 of this Act, a CAAPP entry fee of \$5,000.

(B) If the construction permit application involves (i) a new source or emission unit subject to Section 39.2 of this Act, (ii) a commercial incinerator or other municipal waste, hazardous waste, or waste tire incinerator, (iii) a commercial power generator, or (iv) one or more other emission units designated as a complex source by Agency rulemaking, a fee of \$25,000.

(C) If the construction permit application involves an emissions netting exercise or reliance on a contemporaneous emissions decrease for a pollutant to avoid application of the ~~federal PSD permit program~~ ~~(40 CFR 52.21)~~ or nonattainment new source review ~~(35 Ill. Adm. Code 203)~~, a fee of \$3,000 for each such pollutant.

(D) If the construction permit application is for a new major source subject to the ~~federal PSD permit~~ program, a fee of \$12,000.

(E) If the construction permit application is for a new major source subject to nonattainment new source review, a fee of \$20,000.

(F) If the construction permit application is for a major modification subject to the ~~federal PSD permit~~ program, a fee of \$6,000.

(G) If the construction permit application is for a major modification subject to nonattainment new source review, a fee of \$12,000.

(H) (Blank).

(I) If the construction permit application review involves a determination of the Maximum Achievable Control Technology standard for a pollutant and the project is not otherwise subject to BACT or LAER for a related pollutant under the ~~federal PSD permit~~ program or nonattainment new source review, a fee of \$5,000 per unit for which a determination is requested or otherwise required.

(J) (Blank).

(3) If a public hearing is held regarding the construction permit application, an administrative fee of \$10,000. This fee shall be submitted at the time the applicant requests a public hearing or, if a public hearing is not requested by the applicant, then within 30 days after the applicant is informed by the Agency that a public hearing will be held.

(c) The fee amounts in this subsection (c) apply to construction permit applications relating to a source that, upon issuance of the construction permit, will not (i) be or become subject to Section 39.5 of this Act (the Clean Air Act Permit Program) or (ii) have or require a federally enforceable state operating permit limiting its potential to emit.

(1) Base fees for each construction permit application shall be assessed as follows:

(A) For a construction permit application involving a single new emission unit, a fee of \$500.

(B) For a construction permit application

involving more than one new emission unit, a fee of \$1,000.

(C) For a construction permit application involving no more than 2 modified emission units, a fee of \$500.

(D) For a construction permit application involving more than 2 modified emission units, a fee of \$1,000.

(2) Supplemental fees for each construction permit application shall be assessed as follows:

(A) If the source is a new source, i.e., does not currently have an operating permit, an entry fee of \$500;

(B) If the construction permit application involves (i) a new source or emission unit subject to Section 39.2 of this Act, (ii) a commercial incinerator or a municipal waste, hazardous waste, or waste tire incinerator, (iii) a commercial power generator, or (iv) an emission unit designated as a complex source by Agency rulemaking, a fee of \$15,000.

(3) If a public hearing is held regarding the construction permit application, an administrative fee of \$10,000. This fee shall be submitted at the time the applicant requests a public hearing or, if a public hearing is not requested by the applicant, then within 30 days after the applicant is informed by the Agency that a public hearing will be held.

(d) If no other fee is applicable under this Section, a construction permit application addressing one or more of the following shall be subject to a filing fee of \$500:

(1) A construction permit application to add or replace a control device on a permitted emission unit.

(2) A construction permit application to conduct a pilot project or trial burn for a permitted emission unit.

(3) A construction permit application for a land remediation project.

(4) (Blank).

(5) A construction permit application to revise an emissions testing methodology or the timing of required emissions testing.

(6) A construction permit application that provides for a change in the name, address, or phone number of any person identified in the permit, or for a change in the stated ownership or control, or for a similar minor administrative permit change at the source.

(e) No fee shall be assessed for a request to correct an issued permit that involves only an Agency error, if the request is received within the deadline for a permit appeal to the Pollution Control Board.

(f) The applicant for a new or revised air pollution construction permit shall submit to the Agency, with the construction permit application, both a certification of the fee that he or she estimates to be due under this Section and the fee itself.

(g) Notwithstanding the requirements of subsection (a) of Section 39 of this Act, the application for an air pollution construction permit shall not be deemed to be filed with the Agency until the Agency receives the initial air pollution construction permit application fee and the certified estimate of the fee required by this Section. Unless the Agency has received the initial air pollution construction permit application fee and the certified estimate of the fee required by this Section, the Agency is not required to review or process the application.

(h) If the Agency determines at any time that a construction permit application is subject to an additional fee under this Section that the applicant has not submitted, the Agency shall notify the applicant in writing of the amount due under this Section. The applicant shall have 60 days to remit the assessed fee to the Agency.

If the proper fee established under this Section is not submitted within 60 days after the request for further remittance:

(1) If the construction permit has not yet been issued, the Agency is not required to further review or process, and the provisions of subsection (a) of Section 39 of this Act do not apply, the application for a construction permit until such time as the proper fee is remitted.

(2) If the construction permit has been issued, the Agency may, upon written notice, immediately revoke the

construction permit.

The denial or revocation of a construction permit does not excuse the applicant from the duty of paying the fees required under this Section.

(i) The Agency may deny the issuance of a pending air pollution construction permit or the subsequent operating permit if the applicant has not paid the required fees by the date required for issuance of the permit. The denial or revocation of a permit for failure to pay a construction permit fee is subject to review by the Board pursuant to the provisions of subsection (a) of Section 40 of this Act.

(j) If the owner or operator undertakes construction without obtaining an air pollution construction permit, the fee under this Section is still required. Payment of the required fee does not preclude the Agency or the Attorney General or other authorized persons from pursuing enforcement against the applicant for failure to have an air pollution construction permit prior to commencing construction.

(k) If an air pollution construction permittee makes a fee payment under this Section from an account with insufficient funds to cover the amount of the fee payment, the Agency shall notify the permittee of the failure to pay the fee. If the permittee fails to pay the fee within 60 days after such notification, the Agency may, by written notice, immediately revoke the air pollution construction permit. Failure of the Agency to notify the permittee of the permittee's failure to make payment does not excuse or alter the duty of the permittee to comply with the provisions of this Section.

(l) The Agency may establish procedures for the collection of air pollution construction permit fees.

(m) Fees collected pursuant to this Section shall be deposited into the Environmental Protection Permit and Inspection Fund.

(Source: P.A. 97-95, eff. 7-12-11.)

(415 ILCS 5/39) (from Ch. 111 1/2, par. 1039)

Sec. 39. Issuance of permits; procedures.

(a) When the Board has by regulation required a permit for the construction, installation, or operation of any type of facility, equipment, vehicle, vessel, or aircraft, the applicant shall apply to the Agency for such permit and it shall be the duty of the Agency to issue such a permit upon proof by the applicant that the facility, equipment, vehicle, vessel, or aircraft will not cause a violation of this Act or of regulations hereunder. The Agency shall adopt such procedures as are necessary to carry out its duties under this Section. In making its determinations on permit applications under this Section the Agency may consider prior adjudications of noncompliance with this Act by the applicant that involved a release of a contaminant into the environment. In granting permits, the Agency may impose reasonable conditions specifically related to the applicant's past compliance history with this Act as necessary to correct, detect, or prevent noncompliance. The Agency may impose such other conditions as may be necessary to accomplish the purposes of this Act, and as are not inconsistent with the regulations promulgated by the Board hereunder. Except as otherwise provided in this Act, a bond or other security shall not be required as a condition for the issuance of a permit. If the Agency denies any permit under this Section, the Agency shall transmit to the applicant within the time limitations of this Section specific, detailed statements as to the reasons the permit application was denied. Such statements shall include, but not be limited to the following:

(i) the Sections of this Act which may be violated if the permit were granted;

(ii) the provision of the regulations, promulgated under this Act, which may be violated if the permit were granted;

(iii) the specific type of information, if any, which the Agency deems the applicant did not provide the Agency; and

(iv) a statement of specific reasons why the Act and the regulations might not be met if the permit were granted.

If there is no final action by the Agency within 90 days after the filing of the application for permit, the applicant may deem the permit issued; except that this time period shall be extended to 180 days when (1) notice and opportunity for public hearing are required by State or federal law or

regulation, (2) the application which was filed is for any permit to develop a landfill subject to issuance pursuant to this subsection, or (3) the application that was filed is for a MSWLF unit required to issue public notice under subsection (p) of Section 39. The 90-day and 180-day time periods for the Agency to take final action do not apply to NPDES permit applications under subsection (b) of this Section, to RCRA permit applications under subsection (d) of this Section, or to UIC permit applications under subsection (e) of this Section.

The Agency shall publish notice of all final permit determinations for development permits for MSWLF units and for significant permit modifications for lateral expansions for existing MSWLF units one time in a newspaper of general circulation in the county in which the unit is or is proposed to be located.

After January 1, 1994 and until July 1, 1998, operating permits issued under this Section by the Agency for sources of air pollution permitted to emit less than 25 tons per year of any combination of regulated air pollutants, as defined in Section 39.5 of this Act, shall be required to be renewed only upon written request by the Agency consistent with applicable provisions of this Act and regulations promulgated hereunder. Such operating permits shall expire 180 days after the date of such a request. The Board shall revise its regulations for the existing State air pollution operating permit program consistent with this provision by January 1, 1994.

After June 30, 1998, operating permits issued under this Section by the Agency for sources of air pollution that are not subject to Section 39.5 of this Act and are not required to have a federally enforceable State operating permit shall be required to be renewed only upon written request by the Agency consistent with applicable provisions of this Act and its rules. Such operating permits shall expire 180 days after the date of such a request. Before July 1, 1998, the Board shall revise its rules for the existing State air pollution operating permit program consistent with this paragraph and shall adopt rules that require a source to demonstrate that it qualifies for a permit under this paragraph.

(b) The Agency may issue NPDES permits exclusively under this subsection for the discharge of contaminants from point sources into navigable waters, all as defined in the Federal Water Pollution Control Act, as now or hereafter amended, within the jurisdiction of the State, or into any well.

All NPDES permits shall contain those terms and conditions, including but not limited to schedules of compliance, which may be required to accomplish the purposes and provisions of this Act.

The Agency may issue general NPDES permits for discharges from categories of point sources which are subject to the same permit limitations and conditions. Such general permits may be issued without individual applications and shall conform to regulations promulgated under Section 402 of the Federal Water Pollution Control Act, as now or hereafter amended.

The Agency may include, among such conditions, effluent limitations and other requirements established under this Act, Board regulations, the Federal Water Pollution Control Act, as now or hereafter amended, and regulations pursuant thereto, and schedules for achieving compliance therewith at the earliest reasonable date.

The Agency shall adopt filing requirements and procedures which are necessary and appropriate for the issuance of NPDES permits, and which are consistent with the Act or regulations adopted by the Board, and with the Federal Water Pollution Control Act, as now or hereafter amended, and regulations pursuant thereto.

The Agency, subject to any conditions which may be prescribed by Board regulations, may issue NPDES permits to allow discharges beyond deadlines established by this Act or by regulations of the Board without the requirement of a variance, subject to the Federal Water Pollution Control Act, as now or hereafter amended, and regulations pursuant thereto.

(c) Except for those facilities owned or operated by sanitary districts organized under the Metropolitan Water Reclamation District Act, no permit for the development or construction of a new pollution control facility may be granted by the Agency unless the applicant submits proof to the Agency that the location of the facility has been approved by the County Board of the county if in an unincorporated area, or the governing body of the municipality when in an incorporated area, in which the facility is to be located in accordance with

Section 39.2 of this Act. For purposes of this subsection (c), and for purposes of Section 39.2 of this Act, the appropriate county board or governing body of the municipality shall be the county board of the county or the governing body of the municipality in which the facility is to be located as of the date when the application for siting approval is filed.

In the event that siting approval granted pursuant to Section 39.2 has been transferred to a subsequent owner or operator, that subsequent owner or operator may apply to the Agency for, and the Agency may grant, a development or construction permit for the facility for which local siting approval was granted. Upon application to the Agency for a development or construction permit by that subsequent owner or operator, the permit applicant shall cause written notice of the permit application to be served upon the appropriate county board or governing body of the municipality that granted siting approval for that facility and upon any party to the siting proceeding pursuant to which siting approval was granted. In that event, the Agency shall conduct an evaluation of the subsequent owner or operator's prior experience in waste management operations in the manner conducted under subsection (i) of Section 39 of this Act.

Beginning August 20, 1993, if the pollution control facility consists of a hazardous or solid waste disposal facility for which the proposed site is located in an unincorporated area of a county with a population of less than 100,000 and includes all or a portion of a parcel of land that was, on April 1, 1993, adjacent to a municipality having a population of less than 5,000, then the local siting review required under this subsection (c) in conjunction with any permit applied for after that date shall be performed by the governing body of that adjacent municipality rather than the county board of the county in which the proposed site is located; and for the purposes of that local siting review, any references in this Act to the county board shall be deemed to mean the governing body of that adjacent municipality; provided, however, that the provisions of this paragraph shall not apply to any proposed site which was, on April 1, 1993, owned in whole or in part by another municipality.

In the case of a pollution control facility for which a development permit was issued before November 12, 1981, if an operating permit has not been issued by the Agency prior to August 31, 1989 for any portion of the facility, then the Agency may not issue or renew any development permit nor issue an original operating permit for any portion of such facility unless the applicant has submitted proof to the Agency that the location of the facility has been approved by the appropriate county board or municipal governing body pursuant to Section 39.2 of this Act.

After January 1, 1994, if a solid waste disposal facility, any portion for which an operating permit has been issued by the Agency, has not accepted waste disposal for 5 or more consecutive calendars years, before that facility may accept any new or additional waste for disposal, the owner and operator must obtain a new operating permit under this Act for that facility unless the owner and operator have applied to the Agency for a permit authorizing the temporary suspension of waste acceptance. The Agency may not issue a new operation permit under this Act for the facility unless the applicant has submitted proof to the Agency that the location of the facility has been approved or re-approved by the appropriate county board or municipal governing body under Section 39.2 of this Act after the facility ceased accepting waste.

Except for those facilities owned or operated by sanitary districts organized under the Metropolitan Water Reclamation District Act, and except for new pollution control facilities governed by Section 39.2, and except for fossil fuel mining facilities, the granting of a permit under this Act shall not relieve the applicant from meeting and securing all necessary zoning approvals from the unit of government having zoning jurisdiction over the proposed facility.

Before beginning construction on any new sewage treatment plant or sludge drying site to be owned or operated by a sanitary district organized under the Metropolitan Water Reclamation District Act for which a new permit (rather than the renewal or amendment of an existing permit) is required, such sanitary district shall hold a public hearing within the municipality within which the proposed facility is to be located, or within the nearest community if the proposed facility is to be located within an unincorporated area, at

which information concerning the proposed facility shall be made available to the public, and members of the public shall be given the opportunity to express their views concerning the proposed facility.

The Agency may issue a permit for a municipal waste transfer station without requiring approval pursuant to Section 39.2 provided that the following demonstration is made:

- (1) the municipal waste transfer station was in existence on or before January 1, 1979 and was in continuous operation from January 1, 1979 to January 1, 1993;
- (2) the operator submitted a permit application to the Agency to develop and operate the municipal waste transfer station during April of 1994;
- (3) the operator can demonstrate that the county board of the county, if the municipal waste transfer station is in an unincorporated area, or the governing body of the municipality, if the station is in an incorporated area, does not object to resumption of the operation of the station; and
- (4) the site has local zoning approval.

(d) The Agency may issue RCRA permits exclusively under this subsection to persons owning or operating a facility for the treatment, storage, or disposal of hazardous waste as defined under this Act.

All RCRA permits shall contain those terms and conditions, including but not limited to schedules of compliance, which may be required to accomplish the purposes and provisions of this Act. The Agency may include among such conditions standards and other requirements established under this Act, Board regulations, the Resource Conservation and Recovery Act of 1976 (P.L. 94-580), as amended, and regulations pursuant thereto, and may include schedules for achieving compliance therewith as soon as possible. The Agency shall require that a performance bond or other security be provided as a condition for the issuance of a RCRA permit.

In the case of a permit to operate a hazardous waste or PCB incinerator as defined in subsection (k) of Section 44, the Agency shall require, as a condition of the permit, that the operator of the facility perform such analyses of the waste to be incinerated as may be necessary and appropriate to ensure the safe operation of the incinerator.

The Agency shall adopt filing requirements and procedures which are necessary and appropriate for the issuance of RCRA permits, and which are consistent with the Act or regulations adopted by the Board, and with the Resource Conservation and Recovery Act of 1976 (P.L. 94-580), as amended, and regulations pursuant thereto.

The applicant shall make available to the public for inspection all documents submitted by the applicant to the Agency in furtherance of an application, with the exception of trade secrets, at the office of the county board or governing body of the municipality. Such documents may be copied upon payment of the actual cost of reproduction during regular business hours of the local office. The Agency shall issue a written statement concurrent with its grant or denial of the permit explaining the basis for its decision.

(e) The Agency may issue UIC permits exclusively under this subsection to persons owning or operating a facility for the underground injection of contaminants as defined under this Act.

All UIC permits shall contain those terms and conditions, including but not limited to schedules of compliance, which may be required to accomplish the purposes and provisions of this Act. The Agency may include among such conditions standards and other requirements established under this Act, Board regulations, the Safe Drinking Water Act (P.L. 93-523), as amended, and regulations pursuant thereto, and may include schedules for achieving compliance therewith. The Agency shall require that a performance bond or other security be provided as a condition for the issuance of a UIC permit.

The Agency shall adopt filing requirements and procedures which are necessary and appropriate for the issuance of UIC permits, and which are consistent with the Act or regulations adopted by the Board, and with the Safe Drinking Water Act (P.L. 93-523), as amended, and regulations pursuant thereto.

The applicant shall make available to the public for inspection, all documents submitted by the applicant to the Agency in furtherance of an application, with the exception of trade secrets, at the office of the county board or governing

body of the municipality. Such documents may be copied upon payment of the actual cost of reproduction during regular business hours of the local office. The Agency shall issue a written statement concurrent with its grant or denial of the permit explaining the basis for its decision.

(f) In making any determination pursuant to Section 9.1 of this Act:

(1) The Agency shall have authority to make the determination of any question required to be determined by the Clean Air Act, as now or hereafter amended, this Act, or the regulations of the Board, including the determination of the Lowest Achievable Emission Rate, Maximum Achievable Control Technology, or Best Available Control Technology, consistent with the Board's regulations, if any.

(2) The Agency shall adopt requirements as necessary to implement public participation procedures, including, but not limited to, public notice, comment, and an opportunity for hearing, which must accompany the processing of applications for PSD permits. The Agency shall briefly describe and respond to all significant comments on the draft permit raised during the public comment period or during any hearing. The Agency may group related comments together and provide one unified response for each issue raised.

(3) Any complete permit application submitted to the Agency under this subsection for a PSD permit shall be granted or denied by the Agency not later than one year after the filing of such completed application.

~~(4) (2) The Agency shall, after conferring with the applicant, give written notice to the applicant of its proposed decision on the application including the terms and conditions of the permit to be issued and the facts, conduct or other basis upon which the Agency will rely to support its proposed action.~~

~~(3) Following such notice, the Agency shall give the applicant an opportunity for a hearing in accordance with the provisions of Sections 10-25 through 10-60 of the Illinois Administrative Procedure Act.~~

(g) The Agency shall include as conditions upon all permits issued for hazardous waste disposal sites such restrictions upon the future use of such sites as are reasonably necessary to protect public health and the environment, including permanent prohibition of the use of such sites for purposes which may create an unreasonable risk of injury to human health or to the environment. After administrative and judicial challenges to such restrictions have been exhausted, the Agency shall file such restrictions of record in the Office of the Recorder of the county in which the hazardous waste disposal site is located.

(h) A hazardous waste stream may not be deposited in a permitted hazardous waste site unless specific authorization is obtained from the Agency by the generator and disposal site owner and operator for the deposit of that specific hazardous waste stream. The Agency may grant specific authorization for disposal of hazardous waste streams only after the generator has reasonably demonstrated that, considering technological feasibility and economic reasonableness, the hazardous waste cannot be reasonably recycled for reuse, nor incinerated or chemically, physically or biologically treated so as to neutralize the hazardous waste and render it nonhazardous. In granting authorization under this Section, the Agency may impose such conditions as may be necessary to accomplish the purposes of the Act and are consistent with this Act and regulations promulgated by the Board hereunder. If the Agency refuses to grant authorization under this Section, the applicant may appeal as if the Agency refused to grant a permit, pursuant to the provisions of subsection (a) of Section 40 of this Act. For purposes of this subsection (h), the term "generator" has the meaning given in Section 3.205 of this Act, unless: (1) the hazardous waste is treated, incinerated, or partially recycled for reuse prior to disposal, in which case the last person who treats, incinerates, or partially recycles the hazardous waste prior to disposal is the generator; or (2) the hazardous waste is from a response action, in which case the person performing the response action is the generator. This subsection (h) does not apply to any hazardous waste that is restricted from land disposal under 35 Ill. Adm. Code 728.

(i) Before issuing any RCRA permit, any permit for a waste storage site, sanitary landfill, waste disposal site, waste

transfer station, waste treatment facility, waste incinerator, or any waste-transportation operation, or any permit or interim authorization for a clean construction or demolition debris fill operation, the Agency shall conduct an evaluation of the prospective owner's or operator's prior experience in waste management operations and clean construction or demolition debris fill operations. The Agency may deny such a permit, or deny or revoke interim authorization, if the prospective owner or operator or any employee or officer of the prospective owner or operator has a history of:

(1) repeated violations of federal, State, or local laws, regulations, standards, or ordinances in the operation of waste management facilities or sites or clean construction or demolition debris fill operation facilities or sites; or

(2) conviction in this or another State of any crime which is a felony under the laws of this State, or conviction of a felony in a federal court; or conviction in this or another state or federal court of any of the following crimes: forgery, official misconduct, bribery, perjury, or knowingly submitting false information under any environmental law, regulation, or permit term or condition; or

(3) proof of gross carelessness or incompetence in handling, storing, processing, transporting or disposing of waste or clean construction or demolition debris, or proof of gross carelessness or incompetence in using clean construction or demolition debris as fill.

(i-5) Before issuing any permit or approving any interim authorization for a clean construction or demolition debris fill operation in which any ownership interest is transferred between January 1, 2005, and the effective date of the prohibition set forth in Section 22.52 of this Act, the Agency shall conduct an evaluation of the operation if any previous activities at the site or facility may have caused or allowed contamination of the site. It shall be the responsibility of the owner or operator seeking the permit or interim authorization to provide to the Agency all of the information necessary for the Agency to conduct its evaluation. The Agency may deny a permit or interim authorization if previous activities at the site may have caused or allowed contamination at the site, unless such contamination is authorized under any permit issued by the Agency.

(j) The issuance under this Act of a permit to engage in the surface mining of any resources other than fossil fuels shall not relieve the permittee from its duty to comply with any applicable local law regulating the commencement, location or operation of surface mining facilities.

(k) A development permit issued under subsection (a) of Section 39 for any facility or site which is required to have a permit under subsection (d) of Section 21 shall expire at the end of 2 calendar years from the date upon which it was issued, unless within that period the applicant has taken action to develop the facility or the site. In the event that review of the conditions of the development permit is sought pursuant to Section 40 or 41, or permittee is prevented from commencing development of the facility or site by any other litigation beyond the permittee's control, such two-year period shall be deemed to begin on the date upon which such review process or litigation is concluded.

(l) No permit shall be issued by the Agency under this Act for construction or operation of any facility or site located within the boundaries of any setback zone established pursuant to this Act, where such construction or operation is prohibited.

(m) The Agency may issue permits to persons owning or operating a facility for composting landscape waste. In granting such permits, the Agency may impose such conditions as may be necessary to accomplish the purposes of this Act, and as are not inconsistent with applicable regulations promulgated by the Board. Except as otherwise provided in this Act, a bond or other security shall not be required as a condition for the issuance of a permit. If the Agency denies any permit pursuant to this subsection, the Agency shall transmit to the applicant within the time limitations of this subsection specific, detailed statements as to the reasons the permit application was denied. Such statements shall include but not be limited to the following:

(1) the Sections of this Act that may be violated if the permit were granted;

(2) the specific regulations promulgated pursuant to this Act that may be violated if the permit were granted;

(3) the specific information, if any, the Agency deems the applicant did not provide in its application to the Agency; and

(4) a statement of specific reasons why the Act and the regulations might be violated if the permit were granted.

If no final action is taken by the Agency within 90 days after the filing of the application for permit, the applicant may deem the permit issued. Any applicant for a permit may waive the 90 day limitation by filing a written statement with the Agency.

The Agency shall issue permits for such facilities upon receipt of an application that includes a legal description of the site, a topographic map of the site drawn to the scale of 200 feet to the inch or larger, a description of the operation, including the area served, an estimate of the volume of materials to be processed, and documentation that:

(1) the facility includes a setback of at least 200 feet from the nearest potable water supply well;

(2) the facility is located outside the boundary of the 10-year floodplain or the site will be floodproofed;

(3) the facility is located so as to minimize incompatibility with the character of the surrounding area, including at least a 200 foot setback from any residence, and in the case of a facility that is developed or the permitted composting area of which is expanded after November 17, 1991, the composting area is located at least 1/8 mile from the nearest residence (other than a residence located on the same property as the facility);

(4) the design of the facility will prevent any compost material from being placed within 5 feet of the water table, will adequately control runoff from the site, and will collect and manage any leachate that is generated on the site;

(5) the operation of the facility will include appropriate dust and odor control measures, limitations on operating hours, appropriate noise control measures for shredding, chipping and similar equipment, management procedures for composting, containment and disposal of non-compostable wastes, procedures to be used for terminating operations at the site, and recordkeeping sufficient to document the amount of materials received, composted and otherwise disposed of; and

(6) the operation will be conducted in accordance with any applicable rules adopted by the Board.

The Agency shall issue renewable permits of not longer than 10 years in duration for the composting of landscape wastes, as defined in Section 3.155 of this Act, based on the above requirements.

The operator of any facility permitted under this subsection (m) must submit a written annual statement to the Agency on or before April 1 of each year that includes an estimate of the amount of material, in tons, received for composting.

(n) The Agency shall issue permits jointly with the Department of Transportation for the dredging or deposit of material in Lake Michigan in accordance with Section 18 of the Rivers, Lakes, and Streams Act.

(o) (Blank.)

(p) (1) Any person submitting an application for a permit for a new MSWLF unit or for a lateral expansion under subsection (t) of Section 21 of this Act for an existing MSWLF unit that has not received and is not subject to local siting approval under Section 39.2 of this Act shall publish notice of the application in a newspaper of general circulation in the county in which the MSWLF unit is or is proposed to be located. The notice must be published at least 15 days before submission of the permit application to the Agency. The notice shall state the name and address of the applicant, the location of the MSWLF unit or proposed MSWLF unit, the nature and size of the MSWLF unit or proposed MSWLF unit, the nature of the activity proposed, the probable life of the proposed activity, the date the permit application will be submitted, and a statement that persons may file written comments with the Agency concerning the permit application within 30 days after the filing of the permit application unless the time period to submit comments is extended by the Agency.

When a permit applicant submits information to the Agency to supplement a permit application being reviewed by the

Agency, the applicant shall not be required to reissue the notice under this subsection.

(2) The Agency shall accept written comments concerning the permit application that are postmarked no later than 30 days after the filing of the permit application, unless the time period to accept comments is extended by the Agency.

(3) Each applicant for a permit described in part (1) of this subsection shall file a copy of the permit application with the county board or governing body of the municipality in which the MSWLF unit is or is proposed to be located at the same time the application is submitted to the Agency. The permit application filed with the county board or governing body of the municipality shall include all documents submitted to or to be submitted to the Agency, except trade secrets as determined under Section 7.1 of this Act. The permit application and other documents on file with the county board or governing body of the municipality shall be made available for public inspection during regular business hours at the office of the county board or the governing body of the municipality and may be copied upon payment of the actual cost of reproduction.

(q) Within 6 months after the effective date of this amendatory Act of the 97th General Assembly, the Agency, in consultation with the regulated community, shall develop a web portal to be posted on its website for the purpose of enhancing review and promoting timely issuance of permits required by this Act. At a minimum, the Agency shall make the following information available on the web portal:

(1) Checklists and guidance relating to the completion of permit applications, developed pursuant to subsection (s) of this Section, which may include, but are not limited to, existing instructions for completing the applications and examples of complete applications. As the Agency develops new checklists and develops guidance, it shall supplement the web portal with those materials.

(2) Within 2 years after the effective date of this amendatory Act of the 97th General Assembly, permit application forms or portions of permit applications that can be completed and saved electronically, and submitted to the Agency electronically with digital signatures.

(3) Within 2 years after the effective date of this amendatory Act of the 97th General Assembly, an online tracking system where an applicant may review the status of its pending application, including the name and contact information of the permit analyst assigned to the application. Until the online tracking system has been developed, the Agency shall post on its website semi-annual permitting efficiency tracking reports that include statistics on the timeframes for Agency action on the following types of permits received after the effective date of this amendatory Act of the 97th General Assembly: air construction permits, new NPDES permits and associated water construction permits, and modifications of major NPDES permits and associated water construction permits. The reports must be posted by February 1 and August 1 each year and shall include:

(A) the number of applications received for each type of permit, the number of applications on which the Agency has taken action, and the number of applications still pending; and

(B) for those applications where the Agency has not taken action in accordance with the timeframes set forth in this Act, the date the application was received and the reasons for any delays, which may include, but shall not be limited to, (i) the application being inadequate or incomplete, (ii) scientific or technical disagreements with the applicant, USEPA, or other local, state, or federal agencies involved in the permitting approval process, (iii) public opposition to the permit, or (iv) Agency staffing shortages. To the extent practicable, the tracking report shall provide approximate dates when cause for delay was identified by the Agency, when the Agency informed the applicant of the problem leading to the delay, and when the applicant remedied the reason for the delay.

(r) Upon the request of the applicant, the Agency shall notify the applicant of the permit analyst assigned to the application upon its receipt.

(s) The Agency is authorized to prepare and distribute

guidance documents relating to its administration of this Section and procedural rules implementing this Section. Guidance documents prepared under this subsection shall not be considered rules and shall not be subject to the Illinois Administrative Procedure Act. Such guidance shall not be binding on any party.

(t) Except as otherwise prohibited by federal law or regulation, any person submitting an application for a permit may include with the application suggested permit language for Agency consideration. The Agency is not obligated to use the suggested language or any portion thereof in its permitting decision. If requested by the permit applicant, the Agency shall meet with the applicant to discuss the suggested language.

(u) If requested by the permit applicant, the Agency shall provide the permit applicant with a copy of the draft permit prior to any public review period.

(v) If requested by the permit applicant, the Agency shall provide the permit applicant with a copy of the final permit prior to its issuance.

(w) An air pollution permit shall not be required due to emissions of greenhouse gases, as specified by Section 9.15 of this Act.

(x) If, before the expiration of a State operating permit that is issued pursuant to subsection (a) of this Section and contains federally enforceable conditions limiting the potential to emit of the source to a level below the major source threshold for that source so as to exclude the source from the Clean Air Act Permit Program, the Agency receives a complete application for the renewal of that permit, then all of the terms and conditions of the permit shall remain in effect until final administrative action has been taken on the application for the renewal of the permit.

(Source: P.A. 97-95, eff. 7-12-11; 98-284, eff. 8-9-13.)

(415 ILCS 5/40) (from Ch. 111 1/2, par. 1040)
Sec. 40. Appeal of permit denial.

(a) (1) If the Agency refuses to grant or grants with conditions a permit under Section 39 of this Act, the applicant may, within 35 days after the date on which the Agency served its decision on the applicant, petition for a hearing before the Board to contest the decision of the Agency. However, the 35-day period for petitioning for a hearing may be extended for an additional period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Agency within the initial appeal period. The Board shall give 21 day notice to any person in the county where is located the facility in issue who has requested notice of enforcement proceedings and to each member of the General Assembly in whose legislative district that installation or property is located; and shall publish that 21 day notice in a newspaper of general circulation in that county. The Agency shall appear as respondent in such hearing. At such hearing the rules prescribed in Section 32 and subsection (a) of Section 33 of this Act shall apply, and the burden of proof shall be on the petitioner. If, however, the Agency issues an NPDES permit that imposes limits which are based upon a criterion or denies a permit based upon application of a criterion, then the Agency shall have the burden of going forward with the basis for the derivation of those limits or criterion which were derived under the Board's rules.

(2) Except as provided in paragraph (a) (3), if there is no final action by the Board within 120 days after the date on which it received the petition, the petitioner may deem the permit issued under this Act, provided, however, that that period of 120 days shall not run for any period of time, not to exceed 30 days, during which the Board is without sufficient membership to constitute the quorum required by subsection (a) of Section 5 of this Act, and provided further that such 120 day period shall not be stayed for lack of quorum beyond 30 days regardless of whether the lack of quorum exists at the beginning of such 120 day period or occurs during the running of such 120 day period.

(3) Paragraph (a) (2) shall not apply to any permit which is subject to subsection (b), (d) or (e) of Section 39. If there is no final action by the Board within 120 days after the date on which it received the petition, the petitioner shall be entitled to an Appellate Court order pursuant to subsection (d) of Section 41 of this Act.

(b) If the Agency grants a RCRA permit for a hazardous

waste disposal site, a third party, other than the permit applicant or Agency, may, within 35 days after the date on which the Agency issued its decision, petition the Board for a hearing to contest the issuance of the permit. Unless the Board determines that such petition is duplicative or frivolous, or that the petitioner is so located as to not be affected by the permitted facility, the Board shall hear the petition in accordance with the terms of subsection (a) of this Section and its procedural rules governing denial appeals, such hearing to be based exclusively on the record before the Agency. The burden of proof shall be on the petitioner. The Agency and the permit applicant shall be named co-respondents.

The provisions of this subsection do not apply to the granting of permits issued for the disposal or utilization of sludge from publicly-owned sewage works.

(c) Any party to an Agency proceeding conducted pursuant to Section 39.3 of this Act may petition as of right to the Board for review of the Agency's decision within 35 days from the date of issuance of the Agency's decision, provided that such appeal is not duplicative or frivolous. However, the 35-day period for petitioning for a hearing may be extended by the applicant for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Agency within the initial appeal period. If another person with standing to appeal wishes to obtain an extension, there must be a written notice provided to the Board by that person, the Agency, and the applicant, within the initial appeal period. The decision of the Board shall be based exclusively on the record compiled in the Agency proceeding. In other respects the Board's review shall be conducted in accordance with subsection (a) of this Section and the Board's procedural rules governing permit denial appeals.

(d) In reviewing the denial or any condition of a NA NSR permit issued by the Agency pursuant to rules and regulations adopted under subsection (c) of Section 9.1 of this Act, the decision of the Board shall be based exclusively on the record before the Agency including the record of the hearing, if any, ~~held pursuant to paragraph (f)(3) of Section 39~~ unless the parties agree to supplement the record. The Board shall, if it finds the Agency is in error, make a final determination as to the substantive limitations of the permit including a final determination of Lowest Achievable Emission Rate ~~or Best Available Control Technology~~.

(e) (1) If the Agency grants or denies a permit under subsection (b) of Section 39 of this Act, a third party, other than the permit applicant or Agency, may petition the Board within 35 days from the date of issuance of the Agency's decision, for a hearing to contest the decision of the Agency.

(2) A petitioner shall include the following within a petition submitted under subdivision (1) of this subsection:

(A) a demonstration that the petitioner raised the issues contained within the petition during the public notice period or during the public hearing on the NPDES permit application, if a public hearing was held; and

(B) a demonstration that the petitioner is so situated as to be affected by the permitted facility.

(3) If the Board determines that the petition is not duplicative or frivolous and contains a satisfactory demonstration under subdivision (2) of this subsection, the Board shall hear the petition (i) in accordance with the terms of subsection (a) of this Section and its procedural rules governing permit denial appeals and (ii) exclusively on the basis of the record before the Agency. The burden of proof shall be on the petitioner. The Agency and permit applicant shall be named co-respondents.

(f) Any person who files a petition to contest the issuance of a permit by the Agency shall pay a filing fee.
(Source: P.A. 92-574, eff. 6-26-02.)

(415 ILCS 5/40.3 new)

Sec. 40.3. Review process for PSD permits.

(a) (1) Subsection (a) of Section 40 does not apply to any PSD permit that is subject to subsection (c) of Section 9.1 of this Act. If the Agency refused to grant or grants with conditions a PSD permit, the applicant may, within 35 days after final permit action, petition for a hearing before the Board to contest the decision of the Agency. If the Agency fails to act on an application for a PSD permit within the time

frame specified in paragraph (3) of subsection (f) of Section 39 of this Act, the applicant may, before the Agency denies or issues the final permit, petition for a hearing before the Board to compel the Agency to act on the application in a time that is deemed reasonable.

(2) Any person who participated in the public comment process and is either aggrieved or has an interest that is or may be adversely affected by the PSD permit may, within 35 days after final permit action, petition for a hearing before the Board to contest the decision of the Agency. If the petitioner failed to participate in the public comment process, the person may still petition for a hearing, but only upon issues where the final permit conditions reflect changes from the proposed draft permit.

The petition shall: (i) include such facts as necessary to demonstrate that the petitioner is aggrieved or has an interest that is or may be adversely affected; (ii) state the issues proposed for review, citing to the record where those issues were raised or explaining why such issues were not required to be raised during the public comment process; and (iii) explain why the Agency's previous response, if any, to those issues is (A) clearly erroneous or (B) an exercise of discretion or an important policy consideration that the Board should, in its discretion, review.

The Board shall hold a hearing upon a petition to contest the decision of the Agency under this paragraph (a)(2) unless the request is determined by the Board to be frivolous or to lack facially adequate factual statements required in this paragraph (a)(2).

The Agency shall appear as respondent in any hearing pursuant to this subsection (a). At such hearing the rules prescribed in Section 32 and subsection (a) of Section 33 of this Act shall apply, and the burden of proof shall be on the petitioner.

(b) If there is no final action by the Board within 120 days after the date on which it received the petition, the PSD permit shall not be deemed issued; rather, any party shall be entitled to an Appellate Court order pursuant to subsection (d) of Section 41 of this Act. This period of 120 days shall not run for any period of time, not to exceed 30 days, during which the Board is without sufficient membership to constitute the quorum required by subsection (a) of Section 5 of this Act. The 120-day period shall not be stayed for lack of quorum beyond 30 days, regardless of whether the lack of quorum exists at the beginning of the 120-day period or occurs during the running of the 120-day period.

(c) Any person who files a petition to contest the final permit action by the Agency under this Section shall pay the filing fee for petitions for review of permit set forth in Section 7.5.

(d) (1) In reviewing the denial or any condition of a PSD permit issued by the Agency pursuant to rules adopted under subsection (c) of Section 9.1 of this Act, the decision of the Board shall be based exclusively on the record before the Agency unless the parties agree to supplement the record.

(2) If requested by the applicant, the Board may stay the effectiveness of any final Agency action on a PSD permit application identified in subsection (f) of Section 39 of this Act during the pendency of the review process. In such cases, the Board shall stay the effectiveness of all the contested conditions of the PSD permit and may stay the effectiveness of any or all uncontested conditions only if the Board determines that the uncontested conditions would be affected by its review of contested conditions. Any stays granted by the Board shall be deemed effective upon the date of final Agency action appealed by the applicant under this subsection (d). Subsection (b) of Section 10-65 of the Illinois Administrative Procedure Act shall not apply to actions under this subsection (d).

(3) If requested by a party other than the applicant, the Board may stay the effectiveness of any final Agency action on a PSD permit application identified in subsection (f) of Section 39 of this Act during the pendency of the review process. In such cases, the Board may stay the effectiveness of all the contested conditions of the PSD permit and may stay the effectiveness of any or all uncontested conditions only if the Board determines that the uncontested conditions would be affected by its review of contested conditions. The party requesting the stay has the burden of demonstrating the following: (i) that an immediate stay is required in order to preserve the status quo without endangering the public, (ii)

that it is not contrary to public policy, and (iii) that there is a reasonable likelihood of success on the merits. Any stays granted by the Board shall be deemed effective upon the date of final Agency action appealed under this subsection (d) and shall remain in effect until a decision is issued by the Board on the petition. Subsection (b) of Section 10-65 of the Illinois Administrative Procedure Act shall not apply to actions under this paragraph.

(415 ILCS 5/41) (from Ch. 111 1/2, par. 1041)

Sec. 41. Judicial review.

(a) Any party to a Board hearing, any person who filed a complaint on which a hearing was denied, any person who has been denied a variance or permit under this Act, any party adversely affected by a final order or determination of the Board, and any person who participated in the public comment process under subsection (8) of Section 39.5 of this Act may obtain judicial review, by filing a petition for review within 35 days from the date that a copy of the order or other final action sought to be reviewed was served upon the party affected by the order or other final Board action complained of, under the provisions of the Administrative Review Law, as amended and the rules adopted pursuant thereto, except that review shall be afforded directly in the Appellate Court for the District in which the cause of action arose and not in the Circuit Court. Review of any rule or regulation promulgated by the Board shall not be limited by this section but may also be had as provided in Section 29 of this Act.

(b) Any final order of the Board under this Act shall be based solely on the evidence in the record of the particular proceeding involved, and any such final order for permit appeals, enforcement actions and variance proceedings, shall be invalid if it is against the manifest weight of the evidence. Notwithstanding this subsection, the Board may include such conditions in granting a variance and may adopt such rules and regulations as the policies of this Act may require. If an objection is made to a variance condition, the board shall reconsider the condition within not more than 75 days from the date of the objection.

(c) No challenge to the validity of a Board order shall be made in any enforcement proceeding under Title XII of this Act as to any issue that could have been raised in a timely petition for review under this Section.

(d) If there is no final action by the Board within 120 days on a request for a variance which is subject to subsection (c) of Section 38 or a permit appeal which is subject to paragraph (a) (3) of Section 40 or paragraph (d) of Section 40.2 or Section 40.3, the petitioner shall be entitled to an Appellate Court order under this subsection. If a hearing is required under this Act and was not held by the Board, the Appellate Court shall order the Board to conduct such a hearing, and to make a decision within 90 days from the date of the order. If a hearing was held by the Board, or if a hearing is not required under this Act and was not held by the Board, the Appellate Court shall order the Board to make a decision within 90 days from the date of the order.

The Appellate Court shall retain jurisdiction during the pendency of any further action conducted by the Board under an order by the Appellate Court. The Appellate Court shall have jurisdiction to review all issues of law and fact presented upon appeal.

(Source: P.A. 87-1213; 88-1; 88-464; 88-670, eff. 12-2-94.)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER a: PERMITS AND GENERAL PROVISIONS

PART 204
PREVENTION OF SIGNIFICANT DETERIORATION

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AUTHORITY: Implementing Section 9.1 and 10 and authorized by Section 27 and 28.5 of the Environmental Protection Act (Ill. Rev. Stat. 1991, ch. 111 1/2, pars. 1009.1, 1010, and 1027) [415 ILCS 5/9.1, 10 27 and 28.5].

SOURCE: Adopted and codified at, effective; codified at

SUBPART A: GENERAL PROVISIONS

Section 204.100 Incorporations by Reference

The following materials are incorporated by reference. These incorporations do not include any later amendments or editions.

- a) 40 CFR Part 51, Appendix S
- b) 40 CFR Part 51, Appendix W
- c) 40 CFR Part 58, Appendix B

- d) 40 CFR Part 60
- e) 40 CFR Part 61
- f) 40 CFR Part 62
- g) 40 CFR Part 63
- h) 40 CFR 98, Table A-1

Section 204.110 Abbreviations and Acronyms

The following abbreviations and acronyms are used in this Part:

$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
Act	Illinois Environmental Protection Act
BACT	Best Available Control Technology
Board	Illinois Pollution Control Board
CAA	Clean Air Act
CAAPP	Clean Air Act Permit Program
CEMS	Continuous Emissions Monitoring System
CERMS	Continuous Emissions Rate Monitoring System
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalent
CPMS	Continuous Parameter Monitoring System
GHG	Greenhouse Gas
H_2S	hydrogen sulfide
hr	hour
Illinois EPA	Illinois Environmental Protection Agency
LAER	Lowest Achievable Emission Rate
lbs	pounds
lb/hr	pounds per hour
MW	megawatts
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industry Classification System
NO_2	nitrogen dioxide
NO_x	nitrogen oxides
NSPS	New Source Performance Standards
NSR	New Source Review
O_2	oxygen
PAL	Plantwide Applicability Limitation
PEMS	Predictive Emissions Monitoring System
PM	Particulate Matter
$\text{PM}_{2.5}$	Particulate Matter equal to or less than 2.5 microns in diameter (Fine Particulate Matter)
PM_{10}	Particulate Matter equal to or less than 10 microns in diameter
ppm	parts per million
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
SIP	State Implementation Plan

SO ₂	sulfur dioxide
tpy	tons per year
TSP	total suspended particulates
US	United States
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compound
VOM	Volatile Organic Material
yr	year

Section 204.120 Severability

If any provision of this Part, or the application of such provision to any person or circumstance, is held invalid, the remainder of this Part, or the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby.

SUBPART B: DEFINITIONS

Section 204.200 Definitions

Unless otherwise specified in this Part, the definitions of the terms used in this Part shall be the same as those used in the Board Rules and Regulations at 35 Ill. Adm. Code Part 211.

Section 204.210 Actual Emissions

- a) "Actual emissions" means the actual rate of emissions of a regulated NSR pollutant from an emissions unit, as determined in accordance with subsections (b) through (d) of this Section, except that this definition shall not apply for calculating whether a significant emissions increase has occurred, or for establishing a PAL under Subpart K. Instead, Sections 204.240 and 204.590 shall apply for those purposes.
- b) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of normal source operation. The Illinois EPA shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
- c) The Illinois EPA may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
- d) For any emissions unit that has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.

Section 204.220 Adverse Impact on Visibility

“Adverse impact on visibility” means visibility impairment which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the Federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency and time of visibility impairment, and how these factors correlate with (1) times of visitor use of the Federal Class I area, and (2) the frequency and timing of natural conditions that reduce visibility.

Section 204.230 Allowable Emissions

“Allowable emissions” means the emissions rate of a stationary source calculated using the maximum rated capacity of the source (unless the source is subject to federally enforceable limits which restrict the operating rate, or hours of operation, or both) and the most stringent of the following:

- a) The applicable standards as set forth in 40 CFR Parts 60, 61, 62 and 63;
- b) The applicable SIP emissions limitation, including those with a future compliance date; or
- c) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

Section 204.240 Baseline Actual Emissions

“Baseline actual emissions” means the rate of emissions, in tons per year, of a regulated NSR pollutant, as determined in accordance with subsections (a) through (d) of this Section

- a) For any existing electric utility steam generating unit, baseline actual emissions means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding when the owner or operator begins actual construction of the project. The Illinois EPA shall allow the use of a different time period upon a determination that it is more representative of normal source operation.
 - 1) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
 - 2) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.

- 3) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.
 - 4) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subsection (a)(2) of this Section.
- b) For an existing emissions unit (other than an electric utility steam generating unit), baseline actual emissions means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 10-year period immediately preceding either the date the owner or operator begins actual construction of the project, or the date a complete permit application is received by the reviewing authority for a permit required under 40 CFR 52.21 or by the Illinois EPA for a permit required by the SIP, whichever is earlier, except that the 10-year period shall not include any period earlier than November 15, 1990.
- 1) The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions.
 - 2) The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above an emission limitation that was legally enforceable during the consecutive 24-month period.
 - 3) The average rate shall be adjusted downward to exclude any emissions that would have exceeded an emission limitation with which the major stationary source must currently comply, had such major stationary source been required to comply with such limitations during the consecutive 24-month period. "Currently" in the context of a contemporaneous emissions change refers to limitations on emissions and source operation that existed just prior to the date of the contemporaneous change. However, if an emission limitation is part of a Maximum Achievable Control Technology standard that the USEPA proposed or promulgated under 40 CFR Part 63, the baseline actual emissions need only be adjusted if the Illinois EPA has taken credit for such emissions reductions in an attainment demonstration or maintenance plan consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(G).
 - 4) For a regulated NSR pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine

the baseline actual emissions for all the emissions units being changed. A different consecutive 24-month period can be used for each regulated NSR pollutant.

- 5) The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subsections (b)(2) and (b)(3)
- c) For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero; and thereafter, for all other purposes, shall equal the unit's potential to emit.
- d) For a PAL for a stationary source, the baseline actual emissions shall be calculated for existing electric utility steam generating units in accordance with the procedures contained in subsection (a) of this Section, for other existing emissions units in accordance with the procedures contained in subsection (b) of this Section, and for a new emissions unit in accordance with the procedures contained in subsection (c) of this Section.

Section 204.250 Baseline Area

- a) "Baseline area" means any intrastate area (and every part thereof) designated as attainment or unclassifiable under Section 107(d)(1)(A)(ii) or (iii) of the CAA (42 USC 7407(d)(1)(A)(ii) or (iii)) in which the major source or major modification establishing the minor source baseline date would construct or would have an air quality impact for the pollutant for which the baseline date is established, as follows: Equal to or greater than $1 \mu\text{g}/\text{m}^3$ (annual average) for SO_2 , NO_2 , or PM_{10} ; or equal to or greater than $0.3 \mu\text{g}/\text{m}^3$ (annual average) for $\text{PM}_{2.5}$.
- b) Area redesignations under Section 107(d)(1)(A)(ii) or (iii) of the CAA (42 USC 7407(d)(1)(A)(ii) or (iii)) cannot intersect or be smaller than the area of impact of any major stationary source or major modification which:
 - 1) Establishes a minor source baseline date; or
 - 2) Is subject to this Part and would be constructed in the State proposing the redesignation.
- c) Any baseline area established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM_{10} increments, except that such baseline area shall not remain in effect if the Illinois EPA rescinds the corresponding minor source baseline date in accordance with Section 204.520(c).

Section 204.260 Baseline Concentration

- a) "Baseline concentration" means that ambient concentration level that exists in the baseline area at the time of the applicable minor source baseline date. A baseline concentration is determined for each pollutant for which a minor source baseline date is established and shall include:
- 1) The actual emissions, as defined in Section 204.210, representative of sources in existence on the applicable minor source baseline date, except as provided in subsection (b) of this Section; and
 - 2) The allowable emissions of major stationary sources that commenced construction before the major source baseline date, but were not in operation by the applicable minor source baseline date.
- b) The following will not be included in the baseline concentration and will affect the applicable maximum allowable increase(s):
- 1) Actual emissions, as defined in Section 204.210, from any major stationary source on which construction commenced after the major source baseline date. For a major stationary source in existence on the major source baseline date, "actual emissions" for the purposes of this subsection shall mean increases or decreases in actual emissions resulting from construction occurring after the major source baseline date; and
 - 2) Actual emissions increases and decreases, as defined in Section 204.210, at any stationary source occurring after the minor source baseline date.

Section 204.270 Begin Actual Construction

"Begin actual construction" means, in general, initiation of physical on-site construction activities on an emissions unit which are of a permanent nature. Such activities include, but are not limited to, installation of building supports and foundations, laying underground pipework, and construction of permanent storage structures. With respect to a change in method of operations, this term refers to those on-site activities other than preparatory activities which mark the initiation of the change.

Section 204.280 Best Available Control Technology (BACT)

"Best Available Control Technology" means an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each regulated NSR pollutant which would be emitted from any proposed major stationary source or major modification which the Illinois EPA, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such

pollutant. In no event shall application of BACT result in emissions of any pollutant which would exceed the emissions allowed by any applicable standard under 40 CFR Parts 60, 61, 62 and 63. If the Illinois EPA determines that technological or economic limitations on the application of measurement methodology to a particular emissions unit would make the imposition of an emissions standard infeasible, a design, equipment, work practice, operational standard, or combination thereof, may be prescribed instead to satisfy the requirement for the application of BACT. Such standard shall, to the degree possible, set forth the emissions reduction achievable by implementation of such design, equipment, work practice or operation, and shall provide for compliance by means which achieve equivalent results.

Section 204.290 Building, Structure, Facility, or Installation

- a) "Building, structure, facility, or installation" means all of the pollutant-emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same "Major Group" (i.e., which have the same first two-digit code) as described in the *Standard Industrial Classification Manual, 1972*, as amended by the 1977 Supplement (U. S. Government Printing Office stock numbers 4101-0066 and 003-005-00176-0, respectively).
- b) Notwithstanding the provisions of subsection (a) of this Section, building, structure, facility, or installation means, for onshore activities under Standard Industrial Classification (SIC) Major Group 13: Oil and Gas Extraction, all of the pollutant-emitting activities included in Major Group 13 that are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control). Pollutant emitting activities shall be considered adjacent if they are located on the same surface site; or if they are located on surface sites that are located within $\frac{1}{4}$ mile of one another (measured from the center of the equipment on the surface site) and they share equipment. Shared equipment includes, but is not limited to, produced fluids storage tanks, phase separators, natural gas dehydrators or emissions control devices. Surface site, as used in this subsection, has the same meaning as in 40 CFR 63.761.

Section 204.300 Clean Coal Technology

"Clean coal technology" means any technology, including technologies applied at the precombustion, combustion, or post combustion stage, at a new or existing facility which will achieve significant reductions in air emissions of SO₂ or NO_x associated with the utilization of coal in the generation of electricity, or process steam which was not in widespread use as of November 15, 1990.

Section 204.310 Clean Coal Technology Demonstration Project

“Clean coal technology demonstration project” means a project using funds appropriated under the heading “Department of Energy – Clean Coal Technology,” up to a total amount of \$2,500,000,000 for commercial demonstration of clean coal technology, or similar projects funded through appropriations for the USEPA. The Federal contribution for a qualifying project shall be at least 20 percent of the total cost of the demonstration project.

Section 204.320 Commence

“Commence” as applied to construction of a major stationary source or major modification means that the owner or operator has all necessary preconstruction approvals or permits and either has:

- a) Begun, or caused to begin, a continuous program of actual on-site construction of the source, to be completed within a reasonable time; or
- b) Entered into binding agreements or contractual obligations, which cannot be cancelled or modified without substantial loss to the owner or operator, to undertake a program of actual construction of the source to be completed within a reasonable time.

Section 204.330 Complete

“Complete” means, in reference to an application for a permit, that the application contains all of the information necessary for processing the application.

Section 204.340 Construction

“Construction” means any physical change or change in the method of operation (including fabrication, erection, installation, demolition, or modification of an emissions unit) that would result in a change in emissions.

Section 204.350 Dispersion Technique

- a) “Dispersion technique” means any technique which attempts to affect the concentration of a pollutant in the ambient air by:
 - 1) Using that portion of a stack which exceeds good engineering practice stack height;
 - 2) Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or
 - 3) Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one stack; or other

selective handling of exhaust gas streams so as to increase the exhaust gas plume rise.

- b) The preceding sentence in Section 204.350(a) does not include:
- 1) The reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the stationary source generating the gas stream;
 - 2) The merging of exhaust gas streams where:
 - A) The source owner or operator demonstrates that the stationary source was originally designed and constructed with such merged gas streams;
 - B) After July 8, 1985, such merging is part of a change in operation at the stationary source that includes the installation of pollution controls and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion from the definition of dispersion techniques shall apply only to the emission limitation for the pollutant affected by such change in operation; or
 - C) Before July 8, 1985, such merging was part of a change in operation at the stationary source that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or, in the event that no emission limitation was in existence prior to the merging, an increase in the quantity of pollutants actually emitted prior to the merging, the Illinois EPA shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Absent a demonstration by the source owner or operator that merging was not significantly motivated by such intent, the Illinois EPA shall deny credit for the effects of such merging in calculating the allowable emissions for the source;
 - 3) Smoke management in agricultural or silvicultural prescribed burning programs;
 - 4) Episodic restrictions on residential wood burning and open burning; or
 - 5) Techniques under subsection (a)(3) of this Section which increase final exhaust gas plume rise where the resulting allowable emissions of SO₂ from the stationary source do not exceed 5,000 tpy.

Section 204.360 Electric Utility Steam Generating Unit

“Electric utility steam generating unit” means any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam distribution system for the purpose of providing steam to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the affected facility.

Section 204.370 Emissions Unit

“Emissions unit” means any part of a stationary source that emits or would have the potential to emit any regulated NSR pollutant and includes an electric utility steam generating unit as defined in Section 204.360. For purposes of this Part, there are two types of emissions units as described in subsections (a) and (b) of this Section.

- a) A new emissions unit is any emissions unit that is (or will be) newly constructed and that has existed for less than 2 years from the date such emissions unit first operated.
- b) An existing emissions unit is any emissions unit that does not meet the requirements in subsection (a) of this Section. A replacement unit, as defined in Section 204.620, is an existing emissions unit.

Section 204.380 Excessive Concentration

“Excessive concentration” is defined for the purpose of determining good engineering practice stack height under Section 204.420(c) and means:

- a) For sources seeking credit for stack height exceeding that established under Section 204.420(b), a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, and eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and which contributes to a total concentration due to emissions from all sources that is greater than an ambient air quality standard. For sources subject to this Part, an excessive concentration alternatively means a maximum ground-level concentration due to emissions from a stack due in whole or part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features which individually is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects and greater than an ambient air increment under Section 204.900. The allowable emission rate to be used in making demonstrations of excessive concentration shall be prescribed by the NSPS that is applicable to the source category unless the owner or operator demonstrates that this emission rate is infeasible. Where such demonstrations are approved by the

Illinois EPA, an alternative emission rate shall be established in consultation with the source owner or operator.

- b) For sources seeking credit after October 11, 1983, for increases in existing stack heights up to the heights established under Section 204.420(b), either (i) a maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects as provided in subsection (a) of this Section, except that the emission rate specified by the SIP (or, in the absence of such a limit, the actual emission rate) shall be used, or (ii) the actual presence of a local nuisance caused by the existing stack, as determined by the Illinois EPA; and
- c) For sources seeking credit after January 12, 1979 for a stack height determined under Section 204.420(b) where the Illinois EPA requires the use of a field study or fluid model to verify good engineering practice stack height, for sources seeking stack height credit after November 9, 1984 based on the aerodynamic influence of cooling towers, and for sources seeking stack height credit after December 31, 1970 based on the aerodynamic influence of structures not adequately represented by the equations in Section 204.420(b), a maximum ground-level concentration due in whole or part to downwash, wakes or eddy effects that is at least 40 percent in excess of the maximum concentration experienced in the absence of such downwash, wakes, or eddy effects.

Section 204.390 Federal Land Manager

“Federal Land Manager” means, with respect to any lands in the United States, the Secretary of the department with authority over such lands.

Section 204.400 Federally Enforceable

“Federally enforceable” means all limitations and conditions which are enforceable by the USEPA, including those requirements developed pursuant to 40 CFR Parts 60, 61, 62 and 63, requirements within the SIP, any permit requirements established pursuant to 40 CFR 52.21 or this Part or under regulations approved pursuant to 40 CFR Part 51, Subpart I, including operating permits issued under an USEPA-approved program that is incorporated into the SIP and expressly requires adherence to any permit issued under such program.

Section 204.410 Fugitive Emissions

“Fugitive emissions” means those emissions which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

Section 204.420 Good Engineering Practice

“Good engineering practice,” with respect to stack height, means the greater of:

- a) 65 meters, measured from the ground-level elevation at the base of the stack; or

b) The following:

- 1) For a stack in existence on January 12, 1979, and for which the owner or operator had obtained all necessary preconstruction approvals or permits required under 40 CFR Part 52:

$$H_g = 2.5H,$$

provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation;

- 2) For all other stacks:

$$H_g = H + 1.5L$$

where:

H_g = good engineering practice stack height, measured from the ground-level elevation at the base of the stack,

H = height of nearby structure(s) measured from the ground-level elevation at the base of the stack,

L = lesser dimension, height or projected width, of nearby structure(s) provided that the USEPA or Illinois EPA may require the use of a field study or fluid model to verify good engineering practice stack height for the source; or

- c) The height demonstrated by a fluid model or a field study approved by the USEPA or Illinois EPA, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as a result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures or nearby terrain features.

Section 204.430 Greenhouse Gases (GHGs)

"Greenhouse gases (GHGs)" means the air pollutant defined in 40 CFR 86.1818-12(a) as the aggregate group of six greenhouse gases: CO₂, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. To represent an amount of GHGs emitted, the term "tpy CO₂ equivalent emissions (CO₂e)" shall be used and computed as follows:

- a) Multiply the mass amount of emissions (tpy), for each of the six greenhouse gases in the pollutant GHGs, by the gas's associated global warming potential published at Table A-1 to Subpart A of 40 CFR Part 98—Global Warming Potentials.
- b) Sum the resultant value for each gas to compute a tpy CO₂e.

Section 204.440 High Terrain

“High terrain” means any area having an elevation 900 feet or more above the base of the stack of a source.

Section 204.450 Indian Reservation

“Indian Reservation” means any federally recognized reservation established by Treaty, Agreement, executive order, or act of Congress.

Section 204.460 Indian Governing Body

“Indian Governing Body” means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the US and recognized by the US as possessing power of self-government.

Section 204.470 Innovative Control Technology

“Innovative control technology” means any system of air pollution control that has not been adequately demonstrated in practice, but would have a substantial likelihood of achieving greater continuous emissions reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or nonair quality environmental impacts.

Section 204.480 Low Terrain

“Low terrain” means any area other than high terrain.

Section 204.490 Major Modification

- a) “Major modification” means any physical change in or change in the method of operation of a major stationary source that would result in: a significant emissions increase (as defined in Section 204.670) of a regulated NSR pollutant (as defined in Section 204.610) other than GHGs (as defined in Section 204.430); and a significant net emissions increase of that pollutant from the major stationary source.
- b) Any significant emissions increase (as defined in Section 204.670) from any emissions units or net emissions increase (as defined in Section 204.550) at a major stationary source that is significant for VOM or NO_x shall be considered significant for ozone.
- c) A physical change or change in the method of operation shall not include:
 - 1) Routine maintenance, repair and replacement. ;

- 2) Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974 (15 USC 791) (or any superseding legislation) or by reason of a natural gas curtailment plan pursuant to the Federal Power Act (16 USC 791);
- 3) Use of an alternative fuel by reason of an order or rule under Section 125 of the CAA (42 USC 7425);
- 4) Use of an alternative fuel at a steam generating unit to the extent that the fuel is generated from municipal solid waste;
- 5) Use of an alternative fuel or raw material by a stationary source which:
 - A) The source was capable of accommodating before January 6, 1975, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to 40 CFR 52.21 or this Part; or
 - B) The source is approved to use under any permit issued under 40 CFR 52.21 or this Part;
- 6) An increase in the hours of operation or in the production rate, unless such change would be prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 CFR 52.21 or this Part.
- 7) Any change in ownership at a stationary source.
- 8) The installation, operation, cessation, or removal of a temporary clean coal technology demonstration project, provided that the project complies with:
 - A) The Illinois' SIP, and
 - B) Other requirements necessary to attain and maintain the NAAQS during the project and after it is terminated.
- 9) The installation or operation of a permanent clean coal technology demonstration project that constitutes repowering, provided that the project does not result in an increase in the potential to emit of any regulated pollutant emitted by the unit. This exemption shall apply on a pollutant-by-pollutant basis.
- 10) The reactivation of a very clean coal-fired electric utility steam generating unit.

- d) This definition shall not apply with respect to a particular regulated NSR pollutant when the major stationary source is complying with the requirements under Subpart K for a PAL for that pollutant. Instead, the definition at Section 204.1720 shall apply.

Section 204.500 Major Source Baseline Date

“Major source baseline date” means:

- a) In the case of PM₁₀ and SO₂, January 6, 1975;
- b) In the case of NO₂, February 8, 1988; and
- c) In the case of PM_{2.5}, October 20, 2010.

Section 204.510 Major Stationary Source

- a) “Major stationary source” means:
- 1) Any of the following stationary sources of air pollutants which emits, or has the potential to emit, 100 tpy or more of any regulated NSR pollutant: Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), kraft pulp mills, Portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants (with thermal dryers), primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants (which does not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140), fossil-fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants, and charcoal production plants;
 - 2) Notwithstanding the stationary source size specified in subsection (a)(1) of this Section, any stationary source which emits, or has the potential to emit, 250 tpy or more of a regulated NSR pollutant (except GHGs as defined in 204.430); or

- 3) Any physical change that would occur at a stationary source not otherwise qualifying under this Section, as a major stationary source, if the changes would constitute a major stationary source by itself.
- b) A major source that is major for VOM or NO_x shall be considered major for ozone.
- c) The fugitive emissions of a stationary source shall not be included in determining for any of the purposes of this Section whether it is a major stationary source, unless the source belongs to one of the following categories of stationary sources:
 - 1) Coal cleaning plants (with thermal dryers);
 - 2) Kraft pulp mills;
 - 3) Portland cement plants;
 - 4) Primary zinc smelters;
 - 5) Iron and steel mills;
 - 6) Primary aluminum ore reduction plants;
 - 7) Primary copper smelters;
 - 8) Municipal incinerators capable of charging more than 250 tons of refuse per day;
 - 9) Hydrofluoric, sulfuric, or nitric acid plants;
 - 10) Petroleum refineries;
 - 11) Lime plants;
 - 12) Phosphate rock processing plants;
 - 13) Coke oven batteries;
 - 14) Sulfur recovery plants;
 - 15) Carbon black plants (furnace process);
 - 16) Primary lead smelters;
 - 17) Fuel conversion plants;
 - 18) Sintering plants;
 - 19) Secondary metal production plants;
 - 20) Chemical process plants — The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;
 - 21) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
 - 22) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
 - 23) Taconite ore processing plants;
 - 24) Glass fiber processing plants;
 - 25) Charcoal production plants;
 - 26) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input; and

- 27) Any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the CAA.

Section 204.520 Minor Source Baseline Date

- a) "Minor source baseline date" means the earliest date after the trigger date on which a major stationary source or a major modification subject to 40 CFR 52.21 or this Part submits a complete application under the relevant regulations. The trigger date is:
- 1) In the case of PM₁₀ and SO₂, August 7, 1977;
 - 2) In the case of NO₂, February 8, 1988; and
 - 3) In the case of PM_{2.5}, October 20, 2011.
- b) The baseline date is established for each pollutant for which increments or other equivalent measures have been established if:
- 1) The area in which the proposed source or modification would construct is designated as attainment or unclassified under Section 107(d)(1)(A)(ii) or (iii) of the CAA (42 USC 107(d)(1)(A)(ii) or (iii)) for the pollutant on the date of its complete application under 40 CFR 52.21 or this Part; and
 - 2) In the case of a major stationary source, the pollutant would be emitted in significant amounts, or, in the case of a major modification, there would be a significant net emissions increase of the pollutant.
- c) Any minor source baseline date established originally for the TSP increments shall remain in effect and shall apply for purposes of determining the amount of available PM₁₀ increments, except that the Illinois EPA shall rescind a minor source baseline date where it can be shown, to the satisfaction of the Illinois EPA, that the emissions increase from the major stationary source, or net emissions increase from the major modification, responsible for triggering that date did not result in a significant amount of PM₁₀ emissions.

Section 204.530 Nearby

"Nearby," with respect to a specific structure or terrain feature:

- a) For purposes of applying the formulae provided in Section 204.420(b) means that distance up to five times the lesser of the height or the width dimension of a structure, but not greater than 0.8 km (1/2 mile), and
- b) For conducting demonstrations under Section 204.420(c) means not greater than 0.8 km (1/2 mile), except that the portion of a terrain feature may be considered to

be nearby which falls within a distance of up to 10 times the maximum height (Ht) of the feature, not to exceed 2 miles if such feature achieves a height (Ht) 0.8 km from the stack that is at least 40 percent of the good engineering practice stack height determined by the formulae provided in Section 204.420(b)(2) or 26 meters, whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

Section 204.540 Necessary Preconstruction Approvals or Permits

“Necessary preconstruction approvals or permits” mean those permits or approvals required under Federal air quality control laws and regulations and those air quality control laws and regulations which are part of the applicable SIP.

Section 204.550 Net Emissions Increase

- a) “Net emissions increase” means, with respect to any regulated NSR pollutant emitted by a major stationary source, the amount by which the sum of the following exceeds zero:
- 1) The increase in emissions from a particular physical change or change in the method of operation at a stationary source as calculated pursuant to Section 204.800(d); and
 - 2) Any other increases and decreases in actual emissions at the major stationary source that are contemporaneous with the particular change and are otherwise creditable. Baseline actual emissions for calculating increases and decreases under this subsection shall be determined as provided in Section 204.240, except that Sections 204.240(a)(3) and 204.240(b)(4) shall not apply.
- b) An increase or decrease in actual emissions is contemporaneous with the increase from the particular change only if it occurs between:
- 1) The date five years before construction on the particular change commences; and
 - 2) The date that the increase from the particular change occurs.
 - 3) An increase or decrease in actual emissions is creditable only if the reviewing authority has not relied on it in issuing a permit for the source under 40 CFR 52.21 or this Part, which permit is in effect when the increase in actual emissions from the particular change occurs.

- c) An increase or decrease in actual emissions of SO₂, PM, or NO_x that occurs before the applicable minor source baseline date is creditable only if it is required to be considered in calculating the amount of maximum allowable increases remaining available.
- d) An increase in actual emissions is creditable only to the extent that the new level of actual emissions exceeds the old level.
- e) A decrease in actual emissions is creditable only to the extent that:
 - 1) The old level of actual emissions or the old level of allowable emissions, whichever is lower, exceeds the new level of actual emissions;
 - 2) It is enforceable as a practical matter at and after the time that actual construction on the particular change begins; and
 - 3) It has approximately the same qualitative significance for public health and welfare as that attributed to the increase from the particular change.
- f) An increase that results from a physical change at a source occurs when the emissions unit on which construction occurred becomes operational and begins to emit a particular pollutant. An emissions unit that replaces an existing emissions unit that requires shakedown becomes operational only after a reasonable shakedown period, not to exceed 180 days.
- g) Subsection 204.510(b) shall not apply for determining creditable increases and decreases.

Section 204.560 Potential to Emit

“Potential to emit” means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is legally and practicably enforceable by a governmental entity. Secondary emissions do not count in determining the potential to emit of a stationary source.

Section 204.570 Prevention of Significant Deterioration (PSD) Permit

“Prevention of Significant Deterioration (PSD) Permit” means a permit or the portion of a permit for a new major source or major modification that is issued by the Illinois EPA under the construction permit program pursuant to Section 9.1(c) of the Act that has been approved by the USEPA and incorporated into the Illinois SIP to implement the requirements of Section 165 of the CAA and 40 CFR 51.166.

Section 204.580 Project

“Project” means a physical change in, or change in the method of operation of, an existing major stationary source.

Section 204.590 Projected Actual Emissions

- a) “Projected actual emissions” means the maximum annual rate, in tons per year, at which an existing emissions unit is projected to emit a regulated NSR pollutant in any one of the 5 years (12-month period) following the date the unit resumes regular operation after the project, or in any one of the 10 years following that date, if the project involves increasing the emissions unit’s design capacity or its potential to emit that regulated NSR pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source.
- b) In determining the projected actual emissions under subsection (a) of this Section (before beginning actual construction), the owner or operator of the major stationary source:
 - 1) Shall consider all relevant information, including but not limited to, historical operational data, the company’s own representations, the company’s expected business activity and the company’s highest projections of business activity, the company’s filings with the State or Federal regulatory authorities, and compliance plans under Illinois’ SIP; and
 - 2) Shall include fugitive emissions to the extent quantifiable, and emissions associated with startups, shutdowns, and malfunctions; and
 - 3) Shall exclude, in calculating any increase in emissions that results from the particular project, that portion of the unit’s emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions under Section 204.240 and that are also unrelated to the particular project, including any increased utilization due to product demand growth; or
 - 4) In lieu of using the method set out in subsections (b)(1) through (b)(3) of this Section, may elect to use the emissions unit’s potential to emit, in tons per year, as defined under Section 204.560.

Section 204.600 Reactivation of a Very Clean Coal-Fired Electric Utility Steam Generating Unit

“Reactivation of a very clean coal-fired electric utility steam generating unit” means any physical change or change in the method of operation associated with the commencement of commercial operations by a coal-fired utility unit after a period of discontinued operation where the unit:

- a) Has not been in operation for the two-year period prior to the enactment of the CAA Amendments of 1990, and the emissions from such unit continue to be carried in the reviewing authority’s emissions inventory at the time of enactment;
- b) Was equipped prior to shutdown with a continuous system of emissions control that achieves a removal efficiency for SO₂ of no less than 85 percent and a removal efficiency for particulates of no less than 98 percent;
- c) Is equipped with low-NO_x burners prior to the time of commencement of operations following reactivation; and
- d) Is otherwise in compliance with the requirements of the CAA.

Section 204.610 Regulated NSR Pollutant

“Regulated NSR pollutant” means the following:

- a) Any pollutant for which a NAAQS has been promulgated. This includes, but is not limited to, the following:
 - 1) PM_{2.5} emissions and PM₁₀ emissions shall include gaseous emissions from a source or activity which condense to form PM at ambient temperatures. On or after January 1, 2012, such condensable PM shall be accounted for in applicability determinations and in establishing emissions limitations for PM_{2.5} and PM₁₀ in PSD permits. Compliance with emissions limitations for PM_{2.5} and PM₁₀ issued prior to this date shall not be based on condensable PM unless required by the terms and conditions of the permit or the applicable implementation plan. Applicability determinations made prior to this date without accounting for condensable PM shall not be considered in violation of this Part unless the applicable implementation plan required condensable PM to be included.
 - 2) Any pollutant identified under this subsection as a constituent or precursor for a pollutant for which a NAAQS has been promulgated. Precursors for purposes of this Part are the following:
 - A) VOM and NO_x are precursors to ozone in all attainment and unclassifiable areas.
 - B) SO₂ is a precursor to PM_{2.5} in all attainment and unclassifiable areas.

- C) NO_x are presumed to be precursors to PM_{2.5} in all attainment and unclassifiable areas, unless the State demonstrates to the satisfaction of the USEPA or the USEPA demonstrates that emissions of NO_x from sources in a specific area are not a significant contributor to that area's ambient PM_{2.5} concentrations.
- D) VOM are presumed not to be precursors to PM_{2.5} in any attainment or unclassifiable area, unless the State demonstrates to the satisfaction of the USEPA or the USEPA demonstrates that emissions of VOM from sources in a specific area are a significant contributor to that area's ambient PM_{2.5} concentrations.
- b) Any pollutant that is subject to any standard promulgated under Section 111 of the CAA (42 USC 7401);
- c) Any Class I or II substance subject to a standard promulgated under or established by title VI of the CAA (42 USC 7671, et seq.);
- d) Any pollutant that otherwise is subject to regulation as defined in Section 204.710.
- e) Notwithstanding subsections (a) through (d) of this Section, the term "regulated NSR pollutant" shall not include any of all hazardous air pollutants either listed in Section 112(b)(1) of the CAA (42 USC 7412(b)(1)), or added to the list pursuant to Section 112(b)(2) or (b)(3) of the CAA (42 USC 7412(b)(2) or (b)(3)) or substances listed pursuant to Section 112(r)(3) of the CAA (42 USC 7412(r)(3)), and which have not been delisted pursuant to Section 112(b)(3) or (r) of the CAA (42 USC 7412(b)(3) or (r)), unless the listed hazardous air pollutant is also regulated as a constituent or precursor of a pollutant listed under Section 108 of the CAA (42 USC 7408).

Section 204.630 Replacement Unit

"Replacement unit" means an emissions unit for which all the criteria listed in subsections (a) through (d) of this Section are met. No creditable emission reductions shall be generated from shutting down the existing emissions unit that is replaced.

- a) The emissions unit is a reconstructed unit within the meaning of 40 CFR 60.15(b)(1), or the emissions unit completely takes the place of an existing emissions unit.
- b) The emissions unit is identical to or functionally equivalent to the replaced emissions unit.
- c) The replacement does not alter the basic design parameter(s) of the process unit. Basic design parameters of a process unit shall be determined as follows:

- 1) Except as provided in subsection (c)(3) of this Section, for a process unit at a steam electric generating facility, the owner or operator may select as its basic design parameters either maximum hourly heat input and maximum hourly fuel consumption rate or maximum hourly electric output rate and maximum steam flow rate. When establishing fuel consumption specifications in terms of weight or volume, the minimum fuel quality based on British Thermal Units content shall be used for determining the basic design parameter(s) for a coal-fired electric utility steam generating unit.
 - 2) Except as provided in subsection (c)(3) of this Section, the basic design parameter(s) for any process unit that is not at a steam electric generating facility are maximum rate of fuel or heat input, maximum rate of material input, or maximum rate of product output. Combustion process units will typically use maximum rate of fuel input. For sources having multiple end products and raw materials, the owner or operator should consider the primary product or primary raw material when selecting a basic design parameter.
 - 3) If the owner or operator believes the basic design parameter(s) in subsections (c)(1) and (c)(2) of this Section is not appropriate for a specific industry or type of process unit, the owner or operator may propose to the Illinois EPA an alternative basic design parameter(s) for the source's process unit(s). If the Illinois EPA approves of the use of an alternative basic design parameter(s), the Illinois EPA shall issue a permit that is legally enforceable that records such basic design parameter(s) and requires the owner or operator to comply with such parameter(s).
 - 4) The owner or operator shall use credible information, such as results of historic maximum capability tests, design information from the manufacturer, or engineering calculations, in establishing the magnitude of the basic design parameter(s) specified in subsections (c)(2) and (c)(3) of this Section.
 - 5) If design information is not available for a process unit, then the owner or operator shall determine the process unit's basic design parameter(s) using the maximum value achieved by the process unit in the five-year period immediately preceding the planned activity.
 - 6) Efficiency of a process unit is not a basic design parameter.
- d) The replaced emissions unit is permanently removed from the major stationary source, otherwise permanently disabled, or permanently barred from operation by a permit that is enforceable as a practical matter. If the replaced emissions unit is brought back into operation, it shall constitute a new emissions unit.

Section 204.630 Repowering

- a) "Repowering" means replacement of an existing coal-fired boiler with one of the following clean coal technologies: atmospheric or pressurized fluidized bed combustion, integrated gasification combined cycle, magnetohydrodynamics, direct and indirect coal-fired turbines, integrated gasification fuel cells, or as determined by the USEPA, in consultation with the US Secretary of Energy, a derivative of one or more of these technologies, and any other technology capable of controlling multiple combustion emissions simultaneously with improved boiler or generation efficiency and with significantly greater waste reduction relative to the performance of technology in widespread commercial use as of November 15, 1990.
- b) Repowering shall also include any oil and/or gas-fired unit which has been awarded clean coal technology demonstration funding as of January 1, 1991, by the US Department of Energy.
- c) The Illinois EPA shall give expedited consideration to permit applications for any source that satisfies the requirements of this Section and is granted an extension under Section 409 of the CAA (42 USC 7651b).

Section 204.640 Reviewing Authority

"Reviewing authority" means the Illinois EPA or, in the case of permit programs under 40 CFR 52.21, the USEPA or its delegate, the Illinois EPA.

Section 204.650 Secondary Emissions

"Secondary emissions" means emissions which would occur as a result of the construction or operation of a major stationary source or major modification, but do not come from the major stationary source or major modification itself. Secondary emissions include emissions from any offsite support facility which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification. Secondary emissions do not include any emissions which come directly from a mobile source, such as emissions from the tailpipe of a motor vehicle, from a train, or from a vessel. For the purposes of this Part, secondary emissions must be specific, well defined, quantifiable, and impact the same general area as the major stationary source or major modification which causes the secondary emissions.

Section 204.660 Significant

- a) "Significant" means, in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, a rate of emissions that would equal or exceed any of the following rates:

Pollutant and Emissions Rate	
Carbon monoxide	100 tpy
NO _x	40 tpy
SO ₂	40 tpy
PM	25 tpy of particulate matter emissions
PM ₁₀	15 tpy
PM _{2.5}	10 tpy of direct PM _{2.5} emissions; 40 tpy of SO ₂ emissions; 40 tpy of NO _x emissions unless demonstrated not to be a PM _{2.5} precursor under Section 204.610(a)(2)(C)
Ozone	40 tpy of VOM or NO _x
Lead	0.6 tpy
Fluorides	3 tpy
Sulfuric acid mist	7 tpy
Hydrogen sulfide (H ₂ S)	10 tpy
Total reduced sulfur (including H ₂ S):	10 tpy
Reduced sulfur compounds (including H ₂ S):	10 tpy
Reduced sulfur compounds (including H ₂ S):	10 tpy
GHGs	25,000 tpy CO ₂ e
Municipal waste combustor organics (measured as total hexa through octa-chlorinated dibenzo-p-dioxins and dibenzofurans):	3.2×10^{-6} megagrams per year (3.5×10^{-6} tpy)
Municipal waste combustor metals (measured as PM):	14 megagrams per year (15 tpy)
Municipal waste combustor acid gases (measured as SO ₂ and hydrogen chloride):	36 megagrams per year (40 tpy)
Municipal solid waste landfills emissions (measured as nonmethane organic compounds):	45 megagrams per year (50 tpy)
Ozone depleting substances:	100 tpy

- b) “Significant” means, in reference to a net emissions increase or the potential of a source to emit a regulated NSR pollutant that subsection (a) of this Section, does not list, any emissions rate.
- c) Notwithstanding subsection (a) of this Section, “significant” means any emissions rate or any net emissions increase associated with a major stationary source or major modification, which would construct within 10 kilometers of a Class I area, and have an impact on such area equal to or greater than $1 \mu\text{g}/\text{m}^3$ (24-hr average).

Section 204.670 Significant Emissions Increase

“Significant emissions increase” means, for a regulated NSR pollutant, an increase in emissions that is significant (as defined in Section 204.660) for that pollutant.

Section 204.680 Stack

“Stack” means any point in a source designed to emit solids, liquids, or gases into the air, including a pipe or duct but not including flares.

Section 204.690 Stack in Existence

“Stack in existence” means that the owner or operator had (1) begun, or caused to begin, a continuous program of physical on-site construction of the stack or (2) entered into binding agreements or contractual obligations, which could not be cancelled or modified without substantial loss to the owner or operator, to undertake a program of construction of the stack to be completed within a reasonable time.

Section 204.700 Stationary Source

“Stationary source” means any building, structure, facility, or installation which emits or may emit a regulated NSR pollutant. Emissions resulting directly from an internal combustion engine for transportation purposes or from a nonroad engine or nonroad vehicle as defined in Section 216 of the CAA (42 USC 7550) are not a part of a stationary source.

Section 204.710 Subject to Regulation

“Subject to regulation” means, for any air pollutant, that the pollutant is subject to either a provision in the CAA, or a nationally-applicable regulation codified by the USEPA in 40 CFR Parts 50 through 99, that requires actual control of the quantity of emissions of that pollutant, and that such a control requirement has taken effect and is operative to control, limit or restrict the quantity of emissions of that pollutant released from the regulated activity. Pollutants subject to regulation include, but are not limited to, GHGs as defined in Section 204.430.

Section 204.720 Temporary Clean Coal Technology Demonstration Project

“Temporary clean coal technology demonstration project” means a clean coal technology demonstration project that is operated for a period of 5 years or less, and which complies with the Illinois’ SIP and other requirements necessary to attain and maintain the NAAQS during the project and after it is terminated.

SUBPART C: MAJOR STATIONARY SOURCES IN ATTAINMENT AND UNCLASSIFIABLE AREAS**Section 204.800 Applicability**

- a) The requirements of this Part apply to the construction of any new major stationary source (as defined in Section 204.510) or any project at an existing major stationary source in an area designated as attainment or unclassifiable under Sections 107(d)(1)(A)(ii) or (iii) of the CAA (42 USC 7407(d)(1)(A)(ii) or (iii)).
- b) The requirements of Sections 204.810, 204.820, 204.830, 204.840, 204.850, 204.1100, 204.1110, 204.1120, 204.1130, 204.1140, and 204.1200 apply to the construction of any new major stationary source or the major modification of any existing major stationary source, except as this Part otherwise provides.
- c) No new major stationary source or major modification to which the requirements of Sections 204.810, 204.820, 204.830, 204.840, 204.850, 204.1100, 204.1110, 204.1120, 204.1130, 204.1140, and 204.1200 apply shall begin actual construction without a permit that states that the major stationary source or major modification will meet those requirements. The Illinois EPA has authority to issue any such permit.
- d) The requirements of the program will be applied in accordance with the principles set out in subsections (d)(1) through (d)(5) of this Section.
 - 1) Except as otherwise provided in subsection (e) of this Section, and consistent with the definition of major modification contained in Section 204.490, a project is a major modification for a regulated NSR pollutant if it causes two types of emissions increases—a significant emissions increase (as defined in Section 204.670), and a significant net emissions increase (as defined in Sections 204.550 and 204.660). The project is not a major modification if it does not cause a significant emissions increase. If the project causes a significant emissions increase, then the project is a major modification only if it also results in a significant net emissions increase.
 - 2) The procedure for calculating (before beginning actual construction) whether a significant emissions increase (i.e., the first step of the process)

will occur depends upon the type(s) of emissions units involved in the project, according to subsections (d)(3) through (d)(5) of this Section. The procedure for calculating (before beginning actual construction) whether a significant net emissions increase will occur at the major stationary source (i.e., the second step of the process) is contained in the definition in Section 204.550. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

- 3) Actual-to-projected-actual applicability test for projects that only involve existing emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the projected actual emissions (as defined in Section 204.590) and the baseline actual emissions (as defined in Section 204.240(a) and (b)), for each existing emissions unit, equals or exceeds the significant amount for that pollutant (as defined in Section 204.660).
 - 4) Actual-to-potential test for projects that only involve construction of a new emissions unit(s). A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the difference between the potential to emit (as defined in Section 204.560) from each new emissions unit following completion of the project and the baseline actual emissions (as defined in Section 204.240(c)) of these units before the project equals or exceeds the significant amount for that pollutant (as defined in Section 204.660).
 - 5) Hybrid test for projects that involve multiple types of emissions units. A significant emissions increase of a regulated NSR pollutant is projected to occur if the sum of the emissions increases for each emissions unit, using the method specified in subsections (d)(3) and (d)(4) of this Section as applicable with respect to each emissions unit, for each type of emissions unit equals or exceeds the significant amount for that pollutant (as defined in Section 204.660).
- e) Except as otherwise provided in Section 204.1400(f)(2), the provisions of Section 204.1400 apply with respect to any regulated NSR pollutant emitted from projects involving existing emissions units at a major stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility, within the meaning of Section 204.1400(f), that a project that is not a part of a major modification may result in a significant emissions increase of such pollutant, and the owner or operator elects to use the method specified in Sections 204.590(b)(1) through (b)(3) for calculating projected actual emissions.
- f) For any major stationary source for a PAL for a regulated NSR pollutant, the major stationary source shall comply with the requirements under Subpart K.

Section 204.810 Source Information

The owner or operator of a proposed major stationary source or major modification shall submit all information necessary to perform any analysis or make any determination required under this Part.

- a) With respect to a source or modification to which Sections 204.810, 204.1100, 204.1120, and 204.1200 apply, such information shall include:
 - 1) A description of the nature, location, design capacity, and typical operating schedule of the source or modification, including specifications and drawings showing its design and plant layout;
 - 2) A detailed schedule for construction of the source or modification; and
 - 3) A detailed description as to what system of continuous emission reduction is planned for the source or modification, emission estimates, and any other information as necessary to determine that BACT, as applicable, would be applied.
- b) Upon request of the Illinois EPA, the owner or operator shall also provide information on:
 - 1) The air quality impact of the source or modification, including meteorological and topographical data necessary to estimate such impact; and
 - 2) The air quality impacts, and the nature and extent of any or all general commercial, residential, industrial, and other growth which has occurred since August 1, 1977, in the area the source or modification would affect.

Section 204.820 Source Obligation

Any owner or operator who constructs or operates a source or modification not in accordance with the application submitted pursuant to this Part or with the terms of any approval to construct, or any owner or operator of a source or modification subject to this Part who begins actual construction after the effective date of this Part without applying for and receiving approval hereunder, shall be subject to appropriate enforcement action.

Section 204.830 Permit Expiration

Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Illinois EPA may extend the 18-month period upon a satisfactory showing that an extension is justified. This provision does

not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date.

Section 204.840 Effect of Permits

Approval to construct shall not relieve any owner or operator of the responsibility to comply fully with applicable provisions of the SIP and any other requirements under local, State, or Federal law.

Section 204.850 Relaxation of a Source-Specific Limitation

At such time that a particular source or modification becomes a major stationary source or major modification solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of Sections 204.810, 204.820, 204.830, 204.840, 204.850, 204.1100, 204.1110, 204.1120, 204.1130, 204.1140, 204.1200, and 204.1400 shall apply to the source or modification as though construction had not yet commenced on the source or modification.

Section 204.860 Exemptions

- a) The requirements of Sections 204.810, 204.820, 204.830, 204.840, 204.850, 204.1100, 204.1110, 204.1120, 204.1130, 204.1140, 204.1200, and 204.1400 shall not apply to a particular major stationary source or major modification, if:
 - 1) The source or modification would be a nonprofit health or nonprofit educational institution, or a major modification would occur at such an institution and the Governor of Illinois exempts it from those requirements; or
 - 2) The source or modification would be a major stationary source or major modification only if fugitive emissions, to the extent quantifiable, are considered in calculating the potential to emit of the stationary source or modification and the source does not belong to any of the following categories:
 - A) Coal cleaning plants (with thermal dryers);
 - B) Kraft pulp mills;
 - C) Portland cement plants;
 - D) Primary zinc smelters;

- E) Iron and steel mills;
- F) Primary aluminum ore reduction plants;
- G) Primary copper smelters;
- H) Municipal incinerators capable of charging more than 250 tons of refuse per day;
- I) Hydrofluoric, sulfuric, or nitric acid plants;
- J) Petroleum refineries;
- K) Lime plants;
- L) Phosphate rock processing plants;
- M) Coke oven batteries;
- N) Sulfur recovery plants;
- O) Carbon black plants (furnace process);
- P) Primary lead smelters;
- Q) Fuel conversion plants;
- R) Smelting plants;
- S) Secondary metal production plants;
- T) Chemical process plants—The term chemical processing plant shall not include ethanol production facilities that produce ethanol by natural fermentation included in NAICS codes 325193 or 312140;
- U) Fossil-fuel boilers (or combination thereof) totaling more than 250 million British thermal units per hour heat input;
- V) Petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels;
- W) Taconite ore processing plants;
- X) Glass fiber processing plants;
- Y) Charcoal production plants;

- Z) Fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input;
- AA) Any other stationary source category which, as of August 7, 1980, is being regulated under Section 111 or 112 of the CAA (42 USC 7411 or 7412); or
- 3) The source is a portable stationary source which has previously received a permit under 40 CFR 52.21 or this Part, and
- A) The owner or operator proposes to relocate the source and emissions of the source at the new location would be temporary;
- B) The emissions from the source would not exceed its allowable emissions;
- C) The emissions from the source would impact no Class I area and no area where an applicable increment is known to be violated; and
- D) Reasonable notice is given to the Illinois EPA prior to the relocation identifying the proposed new location and the probable duration of operation at the new location. Such notice shall be given to the Illinois EPA not less than 10 days in advance of the proposed relocation unless a different time duration is previously approved by the Illinois EPA.
- b) The requirements of Sections 204.810, 204.820, 204.830, 204.840, 204.850, 204.1100, 204.1110, 204.1120, 204.1130, 204.1140, 204.1200, and 204.1400 shall not apply to a major stationary source or major modification with respect to a particular pollutant if the owner or operator demonstrates that, as to that pollutant, the source or modification is located in an area designated as nonattainment under Section 107 of the CAA (42 USC 7407). Nonattainment designations for revoked NAAQS, as contained in 40 CFR Part 81, shall not be viewed as current designations under Section 107 of the CAA (42 USC 7407) for purposes of determining the applicability of Sections 204.810, 204.820, 204.830, 204.840, 204.850, 204.1100, 204.1110, 204.1120, 204.1130, 204.1140, 204.1200, and 204.1400 to a major stationary source or major modification after the revocation of that NAAQS is effective.
- c) The requirements of Sections 204.1110, 204.1130, and 204.1140 shall not apply to a major stationary source or major modification with respect to a particular pollutant, if the allowable emissions of that pollutant from the source, or the net emissions increase of that pollutant from the modification:
- 1) Would impact no Class I area and no area where an applicable increment is known to be violated, and

- 2) Would be temporary.
- d) The requirements of Sections 204.1110, 204.1130, and 204.1140 as they relate to any maximum allowable increase for a Class II area shall not apply to a major modification at a stationary source that was in existence on March 1, 1978, if the net increase in allowable emissions of each regulated NSR pollutant from the modification after the application of BACT would be less than 50 tpy.

SUBPART D: INCREMENT

Section 204.900 Ambient Air Increments

In areas designated as Class I, II or III, increases in pollutant concentration over the baseline concentration shall be limited to the following:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
Class I Area	
PM _{2.5} :	
Annual arithmetic mean	1
24-hr maximum	2
PM ₁₀ :	
Annual arithmetic mean	4
24-hr maximum	8
SO ₂ :	
Annual arithmetic mean	2
24-hr maximum	5
3-hr maximum	25
NO ₂ :	
Annual arithmetic mean	2.5
Class II Area	
PM _{2.5} :	
Annual arithmetic mean	4
24-hr maximum	9
PM ₁₀ :	
Annual arithmetic mean	17
24-hr maximum	30
SO ₂ :	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	512
NO ₂ :	

Annual arithmetic mean	25
Class III Area	
PM _{2.5} :	
Annual arithmetic mean	8
24-hr maximum	18
PM ₁₀ :	
Annual arithmetic mean	34
24-hr maximum	60
SO ₂ :	
Annual arithmetic mean	40
24-hr maximum	182
3-hr maximum	700
NO ₂ :	
Annual arithmetic mean	50

For any period other than an annual period, the applicable maximum allowable increase may be exceeded during one such period per year at any one location.

Section 204.910 Ambient Air Ceilings

No concentration of a pollutant shall exceed:

- a) The concentration permitted under the national secondary ambient air quality standard, or
- b) The concentration permitted under the national primary ambient air quality standard, whichever concentration is lowest for the pollutant for a period of exposure.

Section 204.920 Restrictions on Area Classifications

- a) All of the following areas which were in existence on August 7, 1977, shall be Class I areas and may not be redesignated:
 - 1) International parks,
 - 2) National wilderness areas which exceed 5,000 acres in size,
 - 3) National memorial parks which exceed 5,000 acres in size, and
 - 4) National parks which exceed 6,000 acres in size.
- b) Areas which were redesignated as Class I under regulations promulgated before August 7, 1977, shall remain Class I, but may be redesignated as provided in this Part.

- c) Any other area, unless otherwise specified in the legislation creating such an area, is initially designated Class II, but may be redesignated as provided in this Part.
- d) The following areas may be redesignated only as Class I or II:
 - 1) An area which as of August 7, 1977, exceeded 10,000 acres in size and was a national monument, a national primitive area, a national preserve, a national recreational area, a national wild and scenic river, a national wildlife refuge, a national lakeshore or seashore; and
 - 2) A national park or national wilderness area established after August 7, 1977, which exceeds 10,000 acres in size.

Section 204.930 Redesignation

- a) As of the initial effective date of 35 Ill. Adm. Code 204, all areas of the State (except as otherwise provided under Section 204.920) are designated Class II as of December 5, 1974. Redesignation (except as otherwise precluded by Section 204.920) may be proposed by the State or Indian Governing Bodies, as provided below, subject to approval by the USEPA as a revision to the applicable SIP.
- b) The State may submit to the USEPA a proposal to redesignate areas of the State Class I or Class II provided that:
 - 1) At least one public hearing has been held in accordance with procedures established in 35 Ill. Adm. Code Part 252;
 - 2) Other State, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation were notified at least 30 days prior to the public hearing;
 - 3) A discussion of the reasons for the proposed redesignation, including a satisfactory description and analysis of the health, environmental, economic, social, and energy effects of the proposed redesignation, was prepared and made available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contained appropriate notification of the availability of such discussion;
 - 4) Prior to the issuance of notice respecting the redesignation of an area that includes any Federal lands, the State has provided written notice to the appropriate Federal Land Manager and afforded adequate opportunity (not in excess of 60 days) to confer with the State respecting the redesignation and to submit written comments and recommendations. In redesignating any area with respect to which any Federal Land Manager had submitted written comments and recommendations, the State shall have published a

list of any inconsistency between such redesignation and such comments and recommendations (together with the reasons for making such redesignation against the recommendation of the Federal Land Manager); and

- 5) The State has proposed the redesignation after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.
- c) Any area other than an area to which Section 204.920 refers may be redesignated as Class III if—
- 1) The redesignation would meet the requirements of subsection (b) of this Section;
 - 2) The redesignation, except any established by an Indian Governing Body, has been specifically approved by the Governor of Illinois, after consultation with the appropriate committees of the legislature, if it is in session, or with the leadership of the legislature, if it is not in session (unless State law provides that the redesignation must be specifically approved by State legislation) and if general purpose units of local government representing a majority of the residents of the area to be redesignated enact legislation or pass resolutions concurring in the redesignation;
 - 3) The redesignation would not cause, or contribute to, a concentration of any air pollutant which would exceed any maximum allowable increase permitted under the classification of any other area or any NAAQS; and
 - 4) Any permit application for any major stationary source or major modification, subject to review under Section 204.1120 which could receive a permit under this Section only if the area in question were redesignated as Class III, and any material submitted as part of that application, were available, insofar as was practicable for public inspection prior to any public hearing on redesignation of the area as Class III.
- d) Lands within the exterior boundaries of Indian Reservations may be redesignated only by the appropriate Indian Governing Body. The appropriate Indian Governing Body may submit to the USEPA a proposal to redesignate areas Class I, Class II, or Class III, provided, that:
- 1) The Indian Governing Body has followed procedures equivalent to those required of a State under subsections (b), (c)(3), and (c)(4) of this Section; and

- 2) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located and which border the Indian Reservation.
- e) The USEPA shall disapprove, within 90 days of submission, a proposed redesignation of any area only if it finds, after notice and opportunity for public hearing, that such redesignation does not meet the procedural requirements of this Section or is inconsistent with Section 204.920. If any such disapproval occurs, the classification of the area shall be that which was in effect prior to the redesignation which was disapproved.
- f) If the USEPA disapproves any proposed redesignation, the State or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the USEPA.

SUBPART E: STACK HEIGHTS

Section 204.1000 Stack Heights

- a) The degree of emission limitation required for control of any air pollutant under this Part shall not be affected in any manner by:
 - 1) So much of the stack height of any source as exceeds good engineering practice, or
 - 2) Any other dispersion technique.
- b) Subsection (a) of this section shall not apply with respect to stack heights in existence before December 31, 1970, or to dispersion techniques implemented before that date.

SUBPART F: REQUIREMENTS FOR MAJOR STATIONARY SOURCES AND MAJOR MODIFICATIONS IN ATTAINMENT AND UNCLASSIFIABLE AREAS

Section 204.1100 Control Technology Review

- a) A major stationary source or major modification shall meet each applicable emissions limitation under the SIP and each applicable emissions standard and standard of performance under 40 CFR Parts 60, 61, 62 and 63.
- b) A new major stationary source shall apply BACT for each regulated NSR pollutant that it would have the potential to emit in significant amounts.
- c) A major modification shall apply BACT for each regulated NSR pollutant for which it would result in a significant net emissions increase at the source. This requirement applies to each proposed emissions unit at which a net emissions

increase in the pollutant would occur as a result of a physical change or change in the method of operation in the unit.

- d) For phased construction projects, the determination of BACT shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of BACT for the source.

Section 204.1110 Source Impact Analysis

The owner or operator of the proposed source or modification shall demonstrate that allowable emission increases from the proposed source or modification, in conjunction with all other applicable emissions increases or reductions (including secondary emissions), would not cause or contribute to air pollution in violation of:

- a) Any NAAQS in any air quality control region; or
- b) Any applicable maximum allowable increase over the baseline concentration in any area.

Section 204.1120 Air Quality Models

- a) All estimates of ambient concentrations required under this Section shall be based on applicable air quality models, databases, and other requirements specified in Appendix W of 40 CFR Part 51 (Guideline on Air Quality Models).
- b) Where an air quality model specified in Appendix W of 40 CFR Part 51 (Guideline on Air Quality Models) is inappropriate, the model may be modified or another model substituted. Such a modification or substitution of a model may be made on a case-by-case basis or, where appropriate, on a generic basis for a specific state program. Written approval of the USEPA must be obtained for any modification or substitution. In addition, use of a modified or substituted model must be subject to notice and opportunity for public comment under procedures set forth in 35 Ill. Adm. Code Part 252.

Section 204.1130 Air Quality Analysis

- a) Preapplication analysis.
 - 1) Any application for a permit under this Part shall contain an analysis of ambient air quality in the area that the major stationary source or major modification would affect for each of the following pollutants:

- A) For the source, each pollutant that it would have the potential to emit in a significant amount;
 - B) For the modification, each pollutant for which it would result in a significant net emissions increase.
- 2) With respect to any such pollutant for which no NAAQS exists, the analysis shall contain such air quality monitoring data as the Illinois EPA determines is necessary to assess ambient air quality for that pollutant in any area that the emissions of that pollutant would affect.
 - 3) With respect to any such pollutant (other than nonmethane hydrocarbons) for which such a standard does exist, the analysis shall contain continuous air quality monitoring data gathered for purposes of determining whether emissions of that pollutant would cause or contribute to a violation of the standard or any maximum allowable increase.
 - 4) In general, the continuous air quality monitoring data that is required shall have been gathered over a period of at least one year and shall represent at least the year preceding receipt of the application, except that, if the Illinois EPA determines that a complete and adequate analysis can be accomplished with monitoring data gathered over a period shorter than one year (but not to be less than four months), the data that is required shall have been gathered over at least that shorter period.
 - 5) The owner or operator of a proposed stationary source or modification of VQM who satisfies all conditions of 40 CFR Part 51 Appendix S, Section IV may provide post approval monitoring data for ozone in lieu of providing reconstruction data as required under this subsection.
- b) Post-construction monitoring. The owner or operator of a major stationary source or major modification shall, after construction of the stationary source or modification, conduct such ambient monitoring as the Illinois EPA determines is necessary to determine the effect emissions from the stationary source or modification may have, or are having, on air quality in any area.
 - c) Operations of monitoring stations. The owner or operator of a major stationary source or major modification shall meet the requirements of Appendix B to 40 CFR Part 58 during the operation of monitoring stations for purposes of satisfying this Section.

Section 204.1140 Additional Impact Analyses

- a) The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the

source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.

- b) The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

SUBPART G: ADDITIONAL REQUIREMENTS FOR CLASS I AREAS

Section 204.1200 Additional Requirements for Sources Impacting Federal Class I Areas

- a) Notice to Federal Land Managers. The Illinois EPA shall provide written notice of any permit application for a proposed major stationary source or major modification, the emissions from which may affect a Class I area, to the Federal Land Manager and the Federal official charged with direct responsibility for management of any lands within any such area. Such notification shall include a copy of all information relevant to the permit application and shall be given within 30 days of receipt and at least 60 days prior to any public hearing on the application for a permit to construct. Such notification shall include an analysis of the proposed source's anticipated impacts on visibility in the Federal Class I area. The Illinois EPA shall also provide the Federal Land Manager and such Federal officials with a copy of the preliminary determination required under 35 Ill. Adm. Code Part 252, and shall make available to them any materials used in making that determination, promptly after the Illinois EPA makes such determination. Finally, the Illinois EPA shall also notify all affected Federal Land Managers within 30 days of receipt of any advance notification of any such permit application.
- b) Federal Land Manager. The Federal Land Manager and the Federal official charged with direct responsibility for management of such lands have an affirmative responsibility to protect the air quality related values (including visibility) of such lands and to consider, in consultation with the Illinois EPA, whether a proposed source or modification will have an adverse impact on such values.
- c) Visibility analysis. The Illinois EPA shall consider any analysis performed by the Federal Land Manager, provided within 30 days of the notification required by subsection (a) of this Section, that shows that a proposed new major stationary source or major modification may have an adverse impact on visibility in any Federal Class I area. Where the Illinois EPA finds that such an analysis does not demonstrate to the satisfaction of the Illinois EPA that an adverse impact on visibility will result in the Federal Class I area, the Illinois EPA must, in the notice of public hearing on the permit application, either explain its decision or give notice as to where the explanation can be obtained.

- d) Denial—impact on air quality related values. The Federal Land Manager of any such lands may demonstrate to the Illinois EPA that the emissions from a proposed source or modification would have an adverse impact on the air quality-related values (including visibility) of those lands, notwithstanding that the change in air quality resulting from emissions from such source or modification would not cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Illinois EPA concurs with such demonstration, then it shall not issue the permit.
- e) Class I variances. The owner or operator of a proposed source or modification may demonstrate to the Federal Land Manager that the emissions from such source or modification would have no adverse impact on the air quality related values of any such lands (including visibility), notwithstanding that the change in air quality resulting from emissions from such source or modification would cause or contribute to concentrations which would exceed the maximum allowable increases for a Class I area. If the Federal Land Manager concurs with such demonstration and he so certifies, the Illinois EPA may, provided that the applicable requirements of this Part are otherwise met, issue the permit with such emission limitations as may be necessary to assure that emissions of SO₂, PM_{2.5}, PM₁₀, and NO_x would not exceed the following maximum allowable increases over minor source baseline concentration for such pollutants:

Pollutant	Maximum allowable increase (micrograms per cubic meter)
PM _{2.5} :	
Annual arithmetic mean	4
24-hr maximum	9
PM ₁₀ :	
Annual arithmetic mean	17
24-hr maximum	30
SO ₂ :	
Annual arithmetic mean	20
24-hr maximum	91
3-hr maximum	325
NO ₂ :	
Annual arithmetic mean	25

- f) Sulfur dioxide variance by Governor with Federal Land Manager's concurrence. The owner or operator of a proposed source or modification which cannot be approved under subsection (e) of this Section may demonstrate to the Governor that the source cannot be constructed by reason of any maximum allowable increase for SO₂ for a period of 24 hours or less applicable to any Class I area and, in the case of Federal mandatory Class I areas, that a variance under this clause would not adversely affect the air quality related values of the area (including visibility). The Governor, after consideration of the Federal Land Manager's recommendation (if any) and subject to his concurrence, may, after

notice and public hearing, grant a variance from such maximum allowable increase. If such variance is granted, the Illinois EPA shall issue a permit to such source or modification pursuant to the requirements of subsection (h) of this Section, provided that the applicable requirements of this Part are otherwise met.

- g) Variance by the Governor with the President's concurrence. In any case where the Governor recommends a variance in which the Federal Land Manager does not concur, the recommendations of the Governor and the Federal Land Manager shall be transmitted to the President. The President may approve the Governor's recommendation if he finds that the variance is in the national interest. If the variance is approved, the Illinois EPA shall issue a permit pursuant to the requirements of subsection (h) of this Section, provided that the applicable requirements of this Part are otherwise met.
- h) Emission limitations for Presidential or gubernatorial variance. In the case of a permit issued pursuant to subsections (f) or (g) of this Section the source or modification shall comply with such emission limitations as may be necessary to assure that emissions of SO₂ from the source or modification would not (during any day on which the otherwise applicable maximum allowable increases are exceeded) cause or contribute to concentrations which would exceed the following maximum allowable increases over the baseline concentration and to assure that such emissions would not cause or contribute to concentrations which exceed the otherwise applicable maximum allowable increases for periods of exposure of 24 hours or less for more than 18 days, not necessarily consecutive, during any annual period.

MAXIMUM ALLOWABLE INCREASE [Micrograms per cubic meter]		
Period of exposure	Low Terrain	High Terrain
24-hr maximum	36	62
3-hr maximum	130	221

SUBPART H: GENERAL OBLIGATIONS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

Section 204.1300 Transmittal of Application to USEPA

The Illinois EPA shall transmit to the USEPA a copy of each permit application submitted pursuant to this Part relating to a major stationary source or a major modification.

Section 204.1310 Public Participation

Prior to the initial issuance of a permit pursuant to this Part or a modification of a permit issued pursuant to this Part, the Illinois EPA shall provide, at a minimum, notice of the proposed issuance or modification of a permit, a comment period, and opportunity for public hearing

pursuant to the Illinois EPA's public participation procedures set forth at 35 Ill. Adm. Code Part 252.

Section 204.1320 Issuance Within One Year of Submittal of Complete Application

Within one year after receipt of a complete application, a permit shall be granted or denied by the Illinois EPA.

Section 204.1330 Permit Rescission

- a) Any permit issued under this Part or a prior version of this Part shall remain in effect, unless and until it expires under Section 204.830 or is rescinded under this Section.
- b) An owner or operator of a stationary source or modification who holds a permit issued under this Part or 40 CFR 52.21 for the construction of a new source or modification that meets the requirements of subsection (c) may request that the Illinois EPA rescind the permit or a particular portion of the permit.
- c) The Illinois EPA may grant an application for rescission if the application shows that this Part would not apply to the source or modification.
- d) If the Illinois EPA rescinds a permit under this Section, the Illinois EPA shall post a notice of the rescission determination on a public web site identified by the Illinois EPA within 60 days of the rescission.

SUBPART I: NONAPPLICABILITY RECORDKEEPING AND REPORTING

Section 204.1400 Recordkeeping and Reporting Requirements for Certain Projects at Major Stationary Sources

Except as otherwise provided in subsection (f)(2) of this Section, the provisions of this Section apply with respect to any regulated NSR pollutant emitted from projects involving existing emissions unit(s) at a major stationary source (other than projects at a source with a PAL) in circumstances where there is a reasonable possibility, within the meaning of subsection (f) of this Section, that a project that is not a major modification for the pollutant may result in a significant emissions increase of such pollutant, and the owner or operator elects to use the method specified in Sections 204.590(b)(1) through (b)(3) for calculating projected actual emissions.

- a) Before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:
 - 1) A description of the project;
 - 2) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project; and

- 3) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions, the projected actual emissions, the amount of emissions excluded under Section 204.590(b)(3) and an explanation for why such amount was excluded, and any netting calculations, if applicable.
- b) If the emissions unit is an existing electric utility steam generating unit, before beginning actual construction, the owner or operator shall provide a copy of the information set out in subsection (a) of this Section to the Illinois EPA. Nothing in this subsection shall be construed to require the owner or operator of such a unit to obtain any determination from the Illinois EPA before beginning actual construction.
- c) The owner or operator shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any emissions unit identified in subsection (a)(2) of this Section; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change, or for a period of 10 years following resumption of regular operations after the change if the project increases the design capacity or potential to emit that regulated NSR pollutant at such emissions unit.
- d) If the unit is an existing electric utility steam generating unit, the owner or operator shall submit a report to the Illinois EPA within 60 days after the end of each year during which records must be generated under subsection (c) of this Section setting out the unit's annual emissions during the calendar year that preceded submission of the report.
- e) If the unit is an existing unit other than an electric utility steam generating unit, the owner or operator shall submit a report to the Illinois EPA if the annual emissions, in tons per year, from the project identified in subsection (a) of this Section, exceed the baseline actual emissions (as documented and maintained pursuant to subsection (a)(3) of this Section), by a significant amount (as defined in Section 204.660) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to subsection (a)(3) of this Section. Such report shall be submitted to the Illinois EPA within 60 days after the end of such year. The report shall contain the following:
- 1) The name, address and telephone number of the major stationary source;
 - 2) The annual emissions as calculated pursuant to subsection (c) of this Section; and

- 3) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).
- f) A "reasonable possibility" under this Section occurs when the owner or operator calculates the project to result in either:
- 1) A projected actual emissions increase of at least 50 percent of the amount that is a "significant emissions increase," as defined in Section 204.670 (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant; or
 - 2) A projected actual emissions increase that, added to the amount of emissions excluded under Section 204.590(b)(3), sums to at least 50 percent of the amount that is a "significant emissions increase," as defined under Section 204.670 (without reference to the amount that is a significant net emissions increase), for the regulated NSR pollutant. For a project for which a reasonable possibility occurs only within the meaning of this subsection (f)(2), and not also within the meaning of subsection (f)(1) of this Section, then subsections (b) through (e) of this Section do not apply to the project.
- g) The owner or operator of the source shall make the information required to be documented and maintained pursuant to this Section available for review upon a request for inspection by the Illinois EPA or USEPA or the general public pursuant to the requirements contained in Section 39.5(8)(e) of the Act.

SUBPART 3. INNOVATIVE CONTROL TECHNOLOGY

Section 204.1500 Innovative Control Technology

- a) An owner or operator of a proposed major stationary source or major modification may request the Illinois EPA in writing no later than the close of the comment period under 35 Ill. Adm. Code Part 252 to approve a system of innovative control technology.
- b) The Illinois EPA shall, with the consent of the Governor, determine that the source or modification may employ a system of innovative control technology, if:
 - 1) The proposed control system would not cause or contribute to an unreasonable risk to public health, welfare, or safety in its operation or function;
 - 2) The owner or operator agrees to achieve a level of continuous emissions reduction equivalent to that which would have been required under Section 204.1100(b), by a date specified by the Illinois EPA. Such date

shall not be later than 4 years from the time of startup or 7 years from permit issuance;

- 3) The source or modification would meet the requirements of Sections 204.1100 and 204.1110, based on the emissions rate that the stationary source employing the system of innovative control technology would be required to meet on the date specified by the Illinois EPA;
 - 4) The source or modification would not before the date specified by the Illinois EPA:
 - A) Cause or contribute to a violation of an applicable NAAQS; or
 - B) Impact any area where an applicable increment is known to be violated; and
 - 5) All other applicable requirements including those for public participation have been met.
 - 6) The provisions of Section 204.1200 (relating to Class I areas) have been satisfied with respect to all periods during the life of the source or modification.
- c) The Illinois EPA shall withdraw any approval to employ a system of innovative control technology made under this Section, if:
- 1) The proposed system fails by the specified date to achieve the required continuous emissions reduction rate; or
 - 2) The proposed system fails before the specified date so as to contribute to an unreasonable risk to public health, welfare, or safety; or
 - 3) The Illinois EPA decides at any time that the proposed system is unlikely to achieve the required level of control or to protect the public health, welfare, or safety.
- d) If a source or modification fails to meet the required level of continuous emission reduction within the specified time period or the approval is withdrawn in accordance with subsection (c) of this Section, the Illinois EPA may allow the source or modification up to an additional 3 years to meet the requirement for the application of BACT through use of a demonstrated system of control.

SUBPART K: PLANTWIDE APPLICABILITY LIMITATION

Section 204.1600 Applicability

- a) The Illinois EPA may approve the use of an actuals PAL for any existing major stationary source if the PAL meets the requirements in this Subpart. The term “PAL” shall mean “actuals PAL” throughout this Subpart.
- b) Any physical change in or change in the method of operation of a major stationary source that maintains its total source-wide emissions below the PAL level, meets the requirements in this Subpart, and complies with the PAL permit:
 - 1) Is not a major modification for the PAL pollutant;
 - 2) Does not have to be approved through the major NSR program; and
 - 3) Is not subject to the provisions in Section 204.850 (restrictions on relaxing enforceable emission limitations that the major stationary source used to avoid applicability of the major NSR program).
- c) Except as provided under subsection (b)(2) of this Section, a major stationary source shall continue to comply with all applicable Federal or State requirements, emission limitations, and work practice requirements that were established prior to the effective date of the PAL.

Section 204.1610 Definitions

For the purposes of this Subpart, the definitions in Sections 204.1620 through 204.1780 apply. When a term is not defined in these sections, it shall have the meaning given in this Part, Part 211, or in the CAA.

Section 204.1620 Actuals PAL

“Actuals PAL” for a major stationary source means a PAL based on the baseline actual emissions (as defined in Section 204.240) of all emissions units (as defined in Section 204.370) at the source, that emit or have the potential to emit the PAL pollutant.

Section 204.1630 Allowable Emissions

“Allowable emissions” means “allowable emissions” as defined in Section 204.230, except that the allowable emissions for any emissions unit shall be calculated considering any emission limitations that are enforceable as a practical matter on the emissions unit’s potential to emit.

Section 204.1640 Continuous Emissions Monitoring System (CEMS)

“Continuous emissions monitoring system” or “CEMS” means all of the equipment that may be required to meet the data acquisition and availability requirements of this Part, to sample, condition (if applicable), analyze, and provide a record of emissions on a continuous basis.

Section 204.1650 Continuous Emissions Rate Monitoring System (CERMS)

“Continuous emissions rate monitoring system” or “CERMS” means the total equipment required for the determination and recording of the pollutant mass emissions rate (in terms of mass per unit of time).

Section 204.1660 Continuous Parameter Monitoring System (CPMS)

“Continuous parameter monitoring system” or “CPMS” means all of the equipment necessary to meet the data acquisition and availability requirements of this Part to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and to record average operational parameter value(s) on a continuous basis.

Section 204.1670 Lowest Achievable Emission Rate (LAER)

“Lowest achievable emission rate” or “LAER” shall have the meaning given by the provisions at 35 Ill. Adm. Code 203.301(a).

Section 204.1680 Major Emissions Unit

“Major emissions unit” means any emissions unit that emits or has the potential to emit 100 tpy or more of the PAL pollutant in an attainment area.

Section 204.1690 Plantwide Applicability Limitation (PAL)

Plantwide applicability limitation” or “PAL” means an emission limitation expressed on a mass basis in tons per year, or expressed in tons per year CO₂e for a GHG emission limitation for a pollutant at a major stationary source, that is enforceable as a practical matter and established source-wide in accordance with this Subpart.

Section 204.1700 PAL Effective Date

“PAL effective date” generally means the date of issuance of the PAL permit. However, the PAL effective date for an increased PAL is the date any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.

Section 204.1710 PAL Effective Period

“PAL effective period” means the period beginning with the PAL effective date and ending 10 years later.

Section 204.1720 PAL Major Modification

“PAL major modification” means, notwithstanding Sections 204.490 and 204.550 (the definitions for major modification, and net emissions increase), any physical change in or change

in the method of operation of the PAL source that causes it to emit the PAL pollutant at a level equal to or greater than the PAL.

Section 204.1730 PAL Permit

“PAL permit” means the major NSR permit, the minor NSR permit, or the State operating permit under a program that is approved into the SIP, or the CAAPP permit issued by the Illinois EPA that establishes a PAL for a major stationary source.

Section 204.1740 PAL Pollutant

“PAL pollutant” means the pollutant for which a PAL is established at a major stationary source.

Section 204.1750 Predictive Emissions Monitoring System (PEMS)

“Predictive emissions monitoring system” or “PEMS” means all of the equipment necessary to monitor process and control device operational parameters (for example, control device secondary voltages and electric currents) and other information (for example, gas flow rate, O₂ or CO₂ concentrations), and calculate and record the mass emissions rate (for example, lb/hr) on a continuous basis.

Section 204.1760 Reasonably Achievable Control Technology (RACT)

“Reasonably Achievable Control Technology” or “RACT” means devices, systems, process modifications, or other apparatus or techniques that are reasonably available taking into account:

- a) The necessity of imposing such controls in order to attain and maintain a national ambient air quality standard;
- b) The social, environmental, and economic impact of such controls; and
- c) Alternative means of providing for attainment and maintenance of such standard.

Section 204.1770 Significant Emissions Unit

“Significant emissions unit” means an emissions unit that emits or has the potential to emit a PAL pollutant in an amount that is equal to or greater than the significant level (as defined in Section 204.660 or in the CAA, whichever is lower) for that PAL pollutant, but less than the amount that would qualify the unit as a major emissions unit as defined in Section 204.1680.

Section 204.1780 Small Emissions Unit

“Small emissions unit” means an emissions unit that emits or has the potential to emit the PAL pollutant in an amount less than the significant level for that PAL pollutant, as defined in Section 204.660 or in the CAA, whichever is lower.

Section 204.1790 Permit Application Requirements

As part of a permit application requesting a PAL, the owner or operator of a major stationary source shall submit the following information to the Illinois EPA for approval:

- a) A list of all emissions units at the source designated as small, significant or major based on their potential to emit. In addition, the owner or operator of the source shall indicate which, if any, Federal or State applicable requirements, emission limitations, or work practices apply to each unit.
- b) Calculations of the baseline actual emissions (with supporting documentation). Baseline actual emissions are to include emissions associated not only with operation of the unit, but also emissions associated with startup, shutdown, and malfunction.
- c) The calculation procedures that the major stationary source owner or operator proposes to use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total for each month as required by Section 204.1890(a).

Section 204.1800 General Requirements for Establishing PAL

- a) The Illinois EPA is allowed to establish a PAL at a major stationary source, provided that at a minimum, the requirements in this Section are met.
 - 1) The PAL shall impose an annual emission limitation expressed on a mass basis in tons per year, or expressed in tons per year CO₂e for a GHG PAL, that is enforceable as a practical matter, for the entire major stationary source. For each month during the PAL effective period after the first 12 months of establishing a PAL, the major stationary source owner or operator shall show that the sum of the monthly emissions from each emissions unit under the PAL for the previous 12 consecutive months is less than the PAL (a 12-month average, rolled monthly). For each month during the first 11 months from the PAL effective date, the major stationary source owner or operator shall show that the sum of the preceding monthly emissions from the PAL effective date for each emissions unit under the PAL is less than the PAL.
 - 2) The PAL shall be established in a PAL permit that meets the public participation requirements in Section 204.1810.
 - 3) The PAL permit shall contain all the requirements of Section 204.1830.
 - 4) The PAL shall include fugitive emissions, to the extent quantifiable, from all emissions units that emit or have the potential to emit the PAL pollutant at the major stationary source.

- 5) Each PAL shall regulate emissions of only one pollutant.
 - 6) Each PAL shall have a PAL effective period of 10 years.
 - 7) The owner or operator of the major stationary source with a PAL shall comply with the monitoring, recordkeeping, and reporting requirements provided in Sections 204.1880 through 204.1900 for each emissions unit under the PAL through the PAL effective period.
- b) At no time (during or after the PAL effective period) are emissions reductions of a PAL pollutant that occur during the PAL effective period creditable as decreases for purposes of offsets pursuant to 35 Ill. Adm. Code Part 203 unless the level of the PAL is reduced by the amount of such emissions reductions and such reductions would be creditable in the absence of the PAL.

Section 204.1810 Public Participation Requirements

PALs for existing major stationary sources shall be established, renewed, or increased through a procedure that is consistent with 35 Ill. Adm. Code Part 252. This includes the requirement that the Illinois EPA provide the public with notice of the proposed approval of a PAL permit and at least a 30-day period for submittal of public comments. The Illinois EPA must address all material comments before taking final action on the permit.

Section 204.1820 Setting the 10-Year Actuals PAL Level

- a) Except as provided in subsection (b) of this Section, the plan shall provide that the actuals PAL level for a major stationary source shall be established as the sum of the baseline actual emissions (as defined in Section 204.240) of the PAL pollutant for each emissions unit at the source, plus an amount equal to the applicable significant level for the PAL pollutant under Section 204.660 or under the CAA, whichever is lower. When establishing the actuals PAL level, for a PAL pollutant, only one consecutive 24-month period must be used to determine the baseline actual emissions for all existing emissions units. However, a different consecutive 24-month period may be used for each different PAL pollutant. Emissions associated with units that were permanently shut down after this 24-month period must be subtracted from the PAL level. The Illinois EPA shall specify a reduced PAL level(s) in tons per year (or tons per year CO₂e for a GHG PAL) in the PAL permit to become effective on the future compliance date(s) of any applicable Federal or State regulatory requirement(s) that the Illinois EPA is aware of prior to issuance of the PAL permit. For instance, if the source owner or operator will be required to reduce emissions from industrial boilers in half from baseline emissions of 60 ppm NO_x to a new rule limit of 30 ppm, then the permit shall contain a future effective PAL level that is equal to the current PAL level reduced by half of the original baseline emissions of such unit(s).

- b) For newly constructed units (which do not include modifications to existing units) on which actual construction began after the 24-month period, in lieu of adding the baseline actual emissions as specified in subsection (a) of this Section, the emissions must be added to the PAL level in an amount equal to the potential to emit of the units.

Section 204.1830 Contents of the PAL Permit

- a) The PAL permit must contain, at a minimum, the information in subsections (a)(1) through (10) of this Section.
- 1) The PAL pollutant and the applicable source-wide emission limitation in tons per year, or tons per year CO₂e for a GHG PAL.
 - 2) The PAL permit effective date and the expiration date of the PAL (PAL effective period).
 - 3) Specification in the PAL permit that if a major stationary source owner or operator applies to renew a PAL in accordance with Section 204.1860 before the end of the PAL effective period, then the PAL shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the Illinois EPA.
 - 4) A requirement that emission calculations for compliance purposes must include emissions from startups, shutdowns, and malfunctions.
 - 5) A requirement that, once the PAL expires, the major stationary source is subject to the requirements of Section 204.1850.
 - 6) The calculation procedures that the major stationary source owner or operator shall use to convert the monitoring system data to monthly emissions and annual emissions based on a 12-month rolling total as required by Section 204.1890(a).
 - 7) A requirement that the major stationary source owner or operator monitor all emissions units in accordance with the provisions under Section 204.1880.
 - 8) A requirement to retain the records required under Section 204.1890 on site. Such records may be retained in an electronic format.
 - 9) A requirement to submit the reports required under Section 204.1900 by the required deadlines.
 - 10) Any other requirements that the Illinois EPA deems necessary to implement and enforce the PAL.

Section 204.1840 Effective Period and Reopening a PAL Permit

The requirements in subsections (a) and (b) of this Section apply to actuals PALs.

- a) PAL effective period. The Illinois EPA shall specify a PAL effective period of 10 years.
- b) Reopening of the PAL permit.
 - 1) During the PAL effective period, the Illinois EPA must reopen the PAL permit to:
 - A) Correct typographical/calculation errors made in setting the PAL or reflect a more accurate determination of emissions used to establish the PAL;
 - B) Reduce the PAL if the owner or operator of the major stationary source creates creditable emissions reductions for use as offsets pursuant to 35 Ill. Adm. Code Part 203; and
 - C) Revise the PAL to reflect an increase in the PAL as provided under Section 204.1810.
 - 2) The Illinois EPA shall have discretion to reopen the PAL permit for the following:
 - A) Reduce the PAL to reflect newly applicable Federal requirements (for example, NSPS) with compliance dates after the PAL effective date.
 - B) Reduce the PAL consistent with any other requirement, that is enforceable as a practical matter, and that the Illinois EPA may impose on the major stationary source under the SIP; and
 - C) Reduce the PAL if the Illinois EPA determines that a reduction is necessary to avoid causing or contributing to a NAAQS or PSD increment violation, or to an adverse impact on an air quality related value that has been identified for a Federal Class I area by a Federal Land Manager and for which information is available to the general public.
- c) Except for the permit reopening in subsection (b)(1)(A) of this Section for the correction of typographical/calculation errors that do not increase the PAL level, all other reopenings shall be carried out in accordance with the public participation requirements of Section 204.1810.

Section 204.1850 Expiration of a PAL

Any PAL that is not renewed in accordance with the procedures in Section 204.1860 shall expire at the end of the PAL effective period, and the requirements in this Section shall apply.

- a) Each emissions unit (or each group of emissions units) that existed under the PAL shall comply with an allowable emission limitation under a revised permit established according to the procedures in subsections (a)(1) and (2) of this Section.
 - 1) Within the time frame specified for PAL renewals in Section 204.1860(b), the major stationary source shall submit a proposed allowable emission limitation for each emissions unit (or each group of emissions units, if such a distribution is more appropriate as decided by the Illinois EPA) by distributing the PAL allowable emissions for the major stationary source among each of the emissions units that existed under the PAL. If the PAL had not yet been adjusted for an applicable requirement that became effective during the PAL effective period, as required under Section 204.1860(e), such distribution shall be made as if the PAL had been adjusted.
 - 2) The Illinois EPA shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as the Illinois EPA determines is appropriate.
- b) Each emissions unit(s) shall comply with the allowable emission limitation on a 12-month rolling basis. The Illinois EPA may approve the use of monitoring systems (source testing, emission factors, etc.) other than CEMS, CERMS, FEMS, or CPMS to demonstrate compliance with the allowable emission limitation.
- c) Until the Illinois EPA issues the revised permit incorporating allowable limits for each emissions unit, or each group of emissions units, as required under subsection (a)(2) of this Section, the source shall continue to comply with a source-wide, multi-unit emissions cap equivalent to the level of the PAL emission limitation.
- d) Any physical change or change in the method of operation at the major stationary source will be subject to major NSR requirements if such change meets the definition of major modification in Section 204.490.
- e) The major stationary source owner or operator shall continue to comply with any State or Federal applicable requirements (BACT, RACT, NSPS, etc.) that may have applied either during the PAL effective period or prior to the PAL effective

period except for those emission limitations that had been established pursuant to Section 204.850, but were eliminated by the PAL in accordance with the provisions in Section 204.1600(b)(3).

Section 204.1860 Renewal of a PAL

- a) The Illinois EPA shall follow the procedures specified in Section 204.1810 in approving any request to renew a PAL for a major stationary source, and shall provide both the proposed PAL level and a written rationale for the proposed PAL level to the public for review and comment. During such public review, any person may propose a PAL level for the source for consideration by the Illinois EPA.
- b) **Application deadline.** A major stationary source owner or operator shall submit a timely application to the Illinois EPA to request renewal of a PAL. A timely application is one that is submitted at least 6 months prior to, but not earlier than 18 months from, the date of permit expiration. This deadline for application submittal is to ensure that the permit will not expire before the permit is renewed. If the owner or operator of a major stationary source submits a complete application to renew the PAL within this time period, then the PAL shall continue to be effective until the revised permit with the renewed PAL is issued.
- c) **Application requirements.** The application to renew a PAL permit shall contain the information required in subsections (c)(1) through (4) of this Section.
 - 1) The information required in Section 204.1790(a) through (c).
 - 2) A proposed PAL level.
 - 3) The sum of the potential to emit of all emissions units under the PAL (with supporting documentation).
 - 4) Any other information the owner or operator wishes the Illinois EPA to consider in determining the appropriate level for renewing the PAL.
- d) **PAL adjustment.** In determining whether and how to adjust the PAL, the Illinois EPA shall consider the options outlined in subsections (d)(1) and (2) of this Section. However, in no case may any such adjustment fail to comply with subsection (d)(3) of this Section.
 - 1) If the emissions level calculated in accordance with Section 204.1820 is equal to or greater than 80 percent of the PAL level, the Illinois EPA may renew the PAL at the same level without considering the factors set forth in subsection (d)(2) of this Section; or

- 2) The Illinois EPA may set the PAL at a level that it determines to be more representative of the source's baseline actual emissions, or that it determines to be more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the Illinois EPA in its written rationale.
- 3) Notwithstanding subsections (d)(1) and (2) of this Section:
 - A) If the potential to emit of the major stationary source is less than the PAL, the Illinois EPA shall adjust the PAL to a level no greater than the potential to emit of the source; and
 - B) The Illinois EPA shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of Section 204.1870 (increasing a PAL).
- e) If the compliance date for a State or Federal requirement that applies to the PAL source occurs during the PAL effective period, and if the Illinois EPA has not already adjusted for such requirement, the PAL shall be adjusted at the time of PAL permit renewal or CAAPP permit renewal, whichever occurs first.

Section 204.1870 Increasing the PAL During the PAL Effective Period

- a) The Illinois EPA may increase a PAL emission limitation only if the major stationary source complies with the provisions in subsections (a)(1) through (4) of this Section.
 - 1) The owner or operator of the major stationary source shall submit a complete application to request an increase in the PAL limit for a PAL major modification. Such application shall identify the emissions unit(s) contributing to the increase in emissions so as to cause the major stationary source's emissions to equal or exceed its PAL.
 - 2) As part of this application, the major stationary source owner or operator shall demonstrate that the sum of the baseline actual emissions of the small emissions units, plus the sum of the baseline actual emissions of the significant and major emissions units assuming application of BACT equivalent controls, plus the sum of the allowable emissions of the new or modified emissions unit(s) exceeds the PAL. The level of control that would result from BACT equivalent controls on each significant or major emissions unit shall be determined by conducting a new BACT analysis at the time the application is submitted, unless the emissions unit is currently required to comply with a BACT or LAER requirement that was established within the preceding 10 years. In such a case, the assumed

control level for that emissions unit shall be equal to the level of BACT or LAER with which that emissions unit must currently comply.

- 3) The owner or operator obtains a major NSR permit for all emissions unit(s) identified in subsection (a)(1) of this Section, regardless of the magnitude of the emissions increase resulting from them (that is, no significant levels apply). These emissions unit(s) shall comply with any emissions requirements resulting from the major NSR process (for example, BACT), even though they have also become subject to the PAL or continue to be subject to the PAL.
- 4) The PAL permit shall require that the increased PAL level shall be effective on the day any emissions unit that is part of the PAL major modification becomes operational and begins to emit the PAL pollutant.
- b) The Illinois EPA shall calculate the new PAL as the sum of the allowable emissions for each modified or new emissions unit, plus the sum of the baseline actual emissions of the significant and major emissions units (assuming application of BACT equivalent controls as determined in accordance with subsection (a)(2)), plus the sum of the baseline actual emissions of the small emissions units.
- c) The PAL permit shall be revised to reflect the increased PAL level pursuant to the public notice requirements of Section 204.1810.

Section 204.1880 Monitoring Requirements

- a) General requirements.
 - 1) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time, or in CO₂e per unit of time for GHG PAL. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.
 - 2) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in subsection (b)(1) through (4) of this Section and must be approved by the Illinois EPA.

- 3) Notwithstanding subsection (a)(2) of this Section, the owner or operator may also employ an alternative monitoring approach that meets subsection (a)(1) of this Section if approved by the Illinois EPA.
 - 4) Failure to use a monitoring system that meets the requirements of this Section renders the PAL invalid.
- b) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in subsections (c) through (i) of this Section:
- 1) Mass balance calculations for activities using coatings or solvents;
 - 2) CEMS;
 - 3) CPMS or PEMS; and
 - 4) Emission factors.
- c) Mass balance calculations. An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:
- 1) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;
 - 2) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and
 - 3) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the Illinois EPA determines there is site-specific data or a site-specific monitoring program to support another content within the range.
- d) CEMS. An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:
- 1) CEMS must comply with applicable Performance Specifications found in 40 CFR Part 60, Appendix B; and

- 2) CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.
- e) CPMS or PEMS. An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:
- 1) The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and
 - 2) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the Illinois EPA, while the emissions unit is operating.
- f) Emission factors. An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:
- 1) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;
 - 2) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and
 - 3) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the Illinois EPA determines that testing is not required.
- g) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.
- h) Notwithstanding the requirements in subsections (c) through (g) of this Subpart, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the Illinois EPA shall, at the time of permit issuance:
- 1) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or

- 2) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.
- i) Re-validation. All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the Illinois EPA. Such testing must occur at least once every 5 years after issuance of the PAL.

Section 204.1890 Recordkeeping Requirements

- a) The PAL permit shall require an owner or operator to retain a copy of all records necessary to determine compliance with any requirement of this Subpart and of the PAL, including a determination of each emissions unit's 12-month rolling total emissions, for 5 years from the date of such record.
- b) The PAL permit shall require an owner or operator to retain a copy of the following records for the duration of the PAL effective period plus 5 years:
 - 1) A copy of the PAL permit application and any applications for revisions to the PAL; and
 - 2) Each annual certification of compliance pursuant to Section 39.5(7)(p)(v) of the Act and the data relied on in certifying the compliance.

Section 204.1900 Reporting and Notification Requirements

The owner or operator shall submit semi-annual monitoring reports and prompt deviation reports to the Illinois EPA in accordance with the CAAPP. The reports shall meet the requirements in subsections (a) through (c) of this Section.

- a) Semi-annual report. The semi-annual report shall be submitted to the Illinois EPA within 30 days of the end of each reporting period. This report shall contain the information required in subsections (a)(1) through (7) of this Section.
 - 1) The identification of owner and operator and the permit number.
 - 2) Total annual emissions (expressed on a mass-basis in tons per year, or expressed in tons per year CO₂e for a GHG PAL) based on a 12-month rolling total for each month in the reporting period recorded pursuant to Section 204.1890(a).
 - 3) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.

- 4) A list of any emissions units modified or added to the major stationary source during the preceding 6-month period.
 - 5) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
 - 6) A notification of a shutdown of any monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by Section 204.1880(g).
 - 7) A signed statement by the responsible official (as defined by the CAAPP) certifying the truth, accuracy, and completeness of the information provided in the report.
- b) Deviation report. The major stationary source owner or operator shall promptly submit reports of any deviations or exceedance of the PAL requirements, including periods where no monitoring is available. A report submitted pursuant to 40 CFR 70.6(a)(3)(iii)(B) shall satisfy this reporting requirement. The deviation reports shall be submitted within the time limits prescribed by the applicable program implementing 40 CFR 70.6(a)(3)(iii)(B). The reports shall contain the following information:
- 1) The identification of owner and operator and the permit number;
 - 2) The PAL requirement that experienced the deviation or that was exceeded;
 - 3) Emissions resulting from the deviation or the exceedance; and
 - 4) A signed statement by the responsible official (as defined by the CAAPP) certifying the truth, accuracy, and completeness of the information provided in the report.
- c) Re-validation results. The owner or operator shall submit to the Illinois EPA the results of any re-validation test or method within 3 months after completion of such test or method.

Section 204.1910 Transition Requirements

- a) The Illinois EPA may not issue a PAL that does not comply with the requirements in this Subpart after the initial effective date of 35 Ill. Adm. Code 204.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE A: GENERAL PROVISIONS
CHAPTER I: POLLUTION CONTROL BOARD

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GENERAL RULES

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AUTHORITY: Implementing Sections 5, 7.1, 7.2, 26, 27, 28, 29, 31, 32, 33, 35, 36, 37, 38, 40, 40.1, 40.2, 41, and 58.7 of the Environmental Protection Act (Act) [415 ILCS 5/5, 7.1, 7.2, 26, 27, 28, 29, 31, 32, 33, 35, 36, 37, 38, 40, 40.1, 40.2, 41, and 58.7] and authorized by Sections 26 and 27 of the Act [415 ILCS 5/26 and 27] and Section 25-101 of the Electronic Commerce Security Act [5 ILCS 175/25-101].

SOURCE: Filed with Secretary of State January 1, 1978; codified 6 Ill. Reg. 8357; Part repealed, new Part adopted in R88-5A at 13 Ill. Reg. 12055, effective July 10, 1989; amended in R90-24 at 15 Ill. Reg. 18677, effective December 12, 1991; amended in R92-7 at 16 Ill. Reg. 18078, effective November 17, 1992; old Part repealed, new Part adopted in R00-20 at 25 Ill. Reg. 446, effective January 1, 2001; amended in R04-24 at 29 Ill. Reg. 8743, effective June 8, 2005; amended in R06-9 at 29 Ill. Reg. 19666, effective November 21, 2005; amended in R07-17 at 31 Ill. Reg. 16110, effective November 21, 2007; amended in R10-22 at 34 Ill. Reg. 19566, effective December 3, 2010; amended in R12-22 at 36 Ill. Reg. 9211, effective June 7, 2012; amended in R13-9 at 37 Ill. Reg. 1655, effective January 28, 2013; amended in R14-21 at 39 Ill. Reg. 2276, effective January 27, 2015; amended in R15-20 at 39 Ill. Reg. 12848, effective September 8, 2015, amended in R16-17 at 40 Ill. Reg. 7912, effective May 20, 2016; amended in R17-18 at 41 Ill. Reg. 9930, effective July 5, 2017; amended in R - at 42 Ill. Reg. effective _____.

SUBPART A: GENERAL PROVISIONS

Section 101.100 Applicability

- a) This Part sets forth the rules generally applicable to proceedings before the Illinois Pollution Control Board (Board), and should be read in conjunction with procedural rules for the Board's specific proceedings, found at 35 Ill. Adm. Code 102 through 130, and the Board's Administrative Rules, found at 2 Ill. Adm. Code 2175. In the event of a conflict between the rules of this Part and those found in subsequent Parts, the more specific requirement applies.
- b) Except when the Board's procedural rules provide otherwise, the provisions of the Code of Civil Procedure [735 ILCS 5] and the Supreme Court Rules [Ill. S. Ct. Rules] do not apply to proceedings before the Board. However, the Board may look to the Code of Civil Procedure and the Supreme Court Rules for guidance when the Board's procedural rules are silent.

(Source: Amended at 39 Ill. Reg. 12848, effective September 8, 2015)

Section 101.102 Severability

If any provision of this Part or its application to any person is adjudged invalid, the adjudication does not affect the validity of this Part as a whole or of any portion not adjudged invalid.

Section 101.104 Repeals

All Board resolutions adopted before January 1, 2001 that relate to procedural matters for Board proceedings are repealed and are superseded by 35 Ill. Adm. Code 101-130.

Section 101.106 Board Authority

- a) The Board has the authority to *determine, define and implement the environmental control standards applicable in the State of Illinois and may adopt rules and regulations in accordance with Title VII of the Act.* [415 ILCS 5/5(b)]
- b) The Board has the *authority to conduct proceedings upon complaints charging violations of the Act, any rule or regulation adopted under the Act, any permit or term or condition of a permit, or any Board order; upon administrative citations; upon petitions for variances or adjusted standards; upon petitions for review of the Agency's final determinations on permit applications in accordance with Title X of the Act; upon petitions to remove seals under Section 34 of the Act; upon other petitions for review of final determination which are made pursuant to the Act or Board rules and which involve a subject which the Board is authorized to regulate. The Board may also conduct other proceedings as may be provided by the Act or any other statute or rule.* [415 ILCS 5/5(d)]
- c) In addition to subsections (a) and (b) the Board has the authority to act as otherwise provided by law.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.108 Board Proceedings

- a) Board proceedings can generally be divided into two categories: rulemaking proceedings and adjudicatory proceedings.
- b) The following are examples of Board rulemaking proceedings: Identical-in-Substance, Clean Air Act/Fast Track, Federally Required Rulemaking, General Rulemaking, and Site-Specific Rulemaking. Procedural rules for these types of proceedings can be found at 35 Ill. Adm. Code 102.
- c) The following are examples of Board adjudicatory proceedings: Enforcement Proceedings (35 Ill. Adm. Code 103), Variance Petitions (35 Ill. Adm. Code 104), Adjusted Standard Petitions (35 Ill. Adm. Code 104), Permit Appeals (35 Ill. Adm. Code 105), Leaking Underground Storage Tank Appeals (35 Ill. Adm.

Code 105), Pollution Control Facility Siting Appeals (35 Ill. Adm. Code 107), and Administrative Citations (35 Ill. Adm. Code 108).

- d) Board decisions will be made at meetings open to the public. Except as provided in subsection (e), 3 members of the Board constitute a quorum, and 3 affirmative votes are required to adopt a Board decision.
- e) At a hearing under Section 34(d) of the Act to determine whether a seal should be removed, *at least one Board Member shall be present, and those Board Members present may render a final decision without regard to the requirements of Section 5(a) of the Act.* [415 ILCS 5/34(d)]

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.110 Public Participation

- a) **General.** The Board encourages public participation in all of its proceedings. The extent to which the law allows for the participation varies, depending on the type of Board proceeding involved, the party status of the person or persons seeking to participate, and the rules governing that type of proceeding. Public participation in particular proceedings may be more specifically delineated by Board or hearing officer order consistent with the provisions of applicable law and the Board's procedural rules. (See Sections 101.114 and 101.628)
- b) **Party/Non-Party Status.** The issue of who constitutes a proper party in each type of adjudicatory proceeding before the Board is addressed in the rules. A person who wishes to participate in a Board adjudicatory proceeding and is not a party will be deemed a participant and will have only those rights specifically provided in these rules. A person who wishes to participate in a Board regulatory proceeding will be deemed a participant and will have only those rights specifically provided in these rules.
- c) **Amicus Curiae Briefs.** Amicus curiae briefs may be filed in any adjudicatory proceeding by any interested person, provided permission is granted by the Board. Response briefs may be allowed by permission of the Board, but not as of right. The briefs must consist of argument only and may not raise facts that are not in evidence in the relevant proceeding. Amicus curiae briefs, and any responses, will be considered by the Board only as time allows. The briefs will not delay decision-making of the Board. (See also Section 101.302(k).)
- d) **Public Remarks at a Board Meeting.** During the time period designated for public remarks, any person physically present, once recognized by the Chairman, may make public remarks to the Board concerning a proceeding listed on that meeting's agenda.

- 1) **Sign-In Sheet.** Beginning at least 15 minutes before the scheduled start of each Board meeting, a public remarks sign-in sheet will be available to the public at the meeting. Anyone who wishes to make public remarks at the meeting must provide the following information on the sign-in sheet:
 - A) Full name;
 - B) Any person he or she is representing; and
 - C) The docket number of the proceeding on which he or she would like to make public remarks.
- 2) **Time Limits.** A time period of up to 30 minutes at the beginning of each Board meeting, as designated on the meeting agenda, is reserved for public remarks. The Chairman may extend the duration of the public remarks portion of the meeting as necessary to accommodate persons who signed in under to subsection (d)(1). A person's public remarks on a given proceeding must not exceed five minutes in length, but this time period may be extended with the Chairman's permission.
- 3) **Nature of Public Remarks.** Public remarks are not made under oath or affirmation and are not subject to cross-examination. Public remarks that are relevant to the proceeding for which they are made may be considered by the Board, but factual statements made during public remarks do not constitute evidence in the proceeding. The public remarks portion of a Board meeting is not a hearing and cannot be used to offer documentary or other physical evidence to the Board. The Chairman may direct persons to cease public remarks that are irrelevant, repetitious, or disruptive. Persons engaging in disorderly conduct may be asked by the Chairman to leave the meeting.
- 4) **Transcription.** The Board will arrange for public remarks to be transcribed. Transcripts of public remarks will be made a part of the record of the proceeding to which the remarks correspond. (See 5 ILCS 120/2.06(g).)

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.111 Informal Recordings of Board Meetings

Any person may record a Board meeting by tape, film, or any other means if the recording process does not interfere with the conduct or decorum of the Board meeting. The Chairman may direct any person who is recording a Board meeting to limit or discontinue the recording if the recording process interferes with the conduct or decorum of the Board meeting.

(Source: Added at 39 Ill. Reg. 2276, effective January 27, 2015)

Section 101.112 Bias and Conflict of Interest

- a) No Board Member or Board employee may represent any other person in any Board proceeding.
- b) No former Board Member or Board employee may represent any other person in any Board proceeding in which he or she participated personally and substantially as a Board Member or Board employee, unless the Board and, as applicable, all parties or proponents in the proceeding consent in writing after disclosure of the participation. For purposes of subsections (a) and (b) representation includes consulting on legal or technical matters, and Board employee means a person the Board employs on a full-time, part-time, contract, or intern basis.
- c) The Board, on its own motion or the motion of any party, may disqualify a hearing officer for bias or conflict of interest as provided by Section 10-30(b) of the IAPA. [5 ILCS 100/10-30(b)]
- d) In accordance with Section 128 of the federal Clean Air Act, at least a majority of Board members must represent the public interest, and must not derive any significant portion of their income from persons subject to permits or enforcement orders under the Clean Air Act or Illinois Environmental Protection Act. Any potential conflicts of interest by Board members must be adequately disclosed.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.114 Ex Parte Communications

- a) For the purposes of this Section, "interested person or party" means a person or entity whose rights, privileges, or interests are the subject of or are directly affected by a regulatory, quasi-adjudicatory, investment, or licensing matter. [5 ILCS 430/5-50(d)]
- b) For the purposes of this Section, "Executive Ethics Commission" means the commission created by the State Officials and Employees Ethics Act. [5 ILCS 430]
- c) Adjudicatory and Regulatory Proceedings. Board Members and Board employees must not engage in an ex parte communication designed to influence their action with respect to an adjudicatory or regulatory proceeding pending before or under consideration by the Board. (See definition of "ex parte communication" in Section 101.202) Whenever practicable, an interested person or party or his or her official representative or attorney should make all communications with respect to an adjudicatory or regulatory proceeding pending before or under consideration by the Board in writing and address them to the Clerk rather than to individual Board Members or Board employees. (See Sections 101.110 and 101.628)

- d) Nothing in this Section precludes Board Members or Board employees from receiving informal complaints about individual pollution sources, or forbids the administrative contacts as would be appropriate for judges and other judicial officers. Information about a pollution source included in the record of a regulatory proceeding is not an ex parte communication with respect to any adjudicatory proceeding concerning the pollution source.
- e) When the Clerk on behalf of the Board, a Board member, or a Board employee receives an ex parte communication from an interested person or party or his or her official representative or attorney, the recipient, in consultation with the Board's ethics officer or his or her designee, must promptly memorialize the communication and make it part of the record of the proceeding. To make an oral ex parte communication part of the record, the substance of the oral communication, along with the identity of each person involved in the communication, will be either set forth in a memorandum and placed in the record or announced on the record at a public hearing.
- f) When the Clerk on behalf of the Board, a Board member, or a Board employee receives an ex parte communication, other than an ex parte communication received from an interested person or party or his or her official representative or attorney, that communication must be promptly reported to the Board's ethics officer or his or her designee *by the recipient of the communication and by any other employee of the Board who responds to the communication.* [5 ILCS 430/5-50(c)].
- 1) *The ethics officer* or his or her designee, in consultation with the recipient of the ex parte communication, must ensure that the ex parte communication is promptly made part of the record of the proceeding.
 - 2) *The ethics officer* or his or her designee, in consultation with the recipient of the ex parte communication, must promptly file the ex parte communication with the Executive Ethics Commission, including:
 - A) All written communications;
 - B) All written responses to the communications;
 - C) A memorandum prepared by the ethics officer stating the nature and substance of all oral communications;
 - D) The identity and job title of the person to whom each communication was made;
 - E) All responses made;

- F) *The identity and job title of the person making each response;*
 - G) *The identity of each person from whom the written or oral ex parte communication was received;*
 - H) *The individual or entity represented by that person;*
 - I) *Any action the person requested or recommended; and*
 - J) *Any other pertinent information.*
- 3) *The disclosure shall also contain the date of any ex parte communication.*
[5 ILCS 430/5-50(c)]

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

SUBPART B: DEFINITIONS

Section 101.200 Definitions Contained in the Act

Unless otherwise provided in 35 Ill. Adm. Code 101-130, or unless a different meaning of a word or term is clear from the context, the definitions of the Act apply to the Board's procedural rules, found in 35 Ill. Adm. Code 101 through 130.

Section 101.202 Definitions for Board's Procedural Rules

Unless otherwise provided in 35 Ill. Adm. Code 101-130, or unless a different meaning of a word or term is clear from the context, the following definitions also apply to the Board's procedural rules, found in 35 Ill. Adm. Code 101 through 130:

"Act" means the Environmental Protection Act. [415 ILCS 5]

"Adjudicatory proceeding" means an action of a quasi-judicial nature brought before the Board under authority granted to the Board by Section 5(d) of the Act or as otherwise provided by law. Adjudicatory proceedings include enforcement, variance, permit appeal, pollution control facility siting appeal, Underground Storage Tank (UST) Fund determination, water well set back exception, adjusted standard, and administrative citation proceedings. Adjudicatory proceedings do not include regulatory, quasi-legislative, or informational proceedings.

"Adjusted standard" or "AS" means an alternative standard granted by the Board in an adjudicatory proceeding under Section 28.1 of the Act and 35 Ill. Adm. Code 104.Subpart D. The adjusted standard applies instead of the rule or regulation of general applicability.

"Administrative citation" or "AC" means a citation issued by the Agency or by a

unit of local government acting as the Agency's delegate. (See 35 Ill. Adm. Code 108.)

"Administrative citation review" or "administrative citation appeal" means a petition for review of an administrative citation. (See 35 Ill. Adm. Code 108.)

"Affidavit" means a sworn, signed statement witnessed by a notary public.

"Agency" means the Illinois Environmental Protection Agency as established by Section 4 of the Act.

"Agency public comment" means information submitted to the Agency on a proposed Agency decision either by oral statement made at an Agency public hearing or written statement submitted to the Agency during the period for comment by the public.

"Agency public hearing" means a public proceeding to provide interested persons an opportunity to understand and comment on a proposed Agency decision.

"Agency public hearing record" means the record of the Agency public hearing, as kept by the Agency.

"Agency recommendation" means the document filed by the Agency under Sections 37(a) and 28.1(d)(3) of the Act in which the Agency provides its recommended disposition of a petition for variance or an adjusted standard. This includes a recommendation to deny, or a recommendation to grant with or without conditions. (See 35 Ill. Adm. Code 104.218 and 104.416.)

"Agency record" means a record of final Agency decision, as kept by the Agency, of those documents required by the State agency record meeting the applicable requirements of 35 Ill. Adm. Code Part 105.

"Amicus curiae brief" means a brief filed in a proceeding by any interested person who is not a party. (See Sections 101.110 and 101.628)

"Applicant" means any person who submits, or has submitted, an application for a permit or for local siting approval under any of the authorities to issue permits or granting of siting approval identified in Sections 39, 39.1, and 39.5 of the Act.

"Article" means *any object, material, device or substance, or whole or partial copy thereof, including any writing, record, document, recording, drawing, sample, specimen, prototype, model, photograph, culture, microorganism, blueprint or map.* [415 ILCS 5/7.1]

"Attorney General" means the Attorney General of the State of Illinois or representatives thereof.

"Authorized representative" means any person who is authorized to act on behalf of another person.

"Board" means the Illinois Pollution Control Board as created in Section 5 of the Act or, if applicable, its designee.

"Board decision" means an opinion or an order voted in favor of by at least three members of the Board at an open Board meeting except in a proceeding to remove a seal under Section 34(d) of the Act.

"Board designee" means an employee of the Board who has been given authority by the Board to carry out a function for the Board (e.g., the Clerk, Assistant Clerk of the Board, or hearing officer).

"Board meeting" means an open meeting held by the Board under Section 5(a) of the Act in which the Board makes its decisions and determinations.

"Board's procedural rules" means the Board's regulations set forth at 35 Ill. Adm. Code 101 through 130.

"Brief" means a written statement that contains a summary of the facts of a proceeding, the pertinent laws, and an argument of how the law applies to the facts supporting a position.

"CAAPP" means the Clean Air Act Permit Program, as adopted in Section 39.5 of the Act.

"CAAPP permit" means any permit issued, renewed, amended, modified or revised pursuant to Section 39.5 of the Act.

"CAAPP permit appeal" means an appeal of a CAAPP permit as addressed by 35 Ill. Adm. Code Part 105.

"Certificate of acceptance" means a certification, executed by a successful petitioner in a variance proceeding, in which the petitioner agrees to be bound by all terms and conditions that the Board has affixed to the grant of variance.

"Chairman" means the Chairman of the Board designated by the Governor under Section 5(a) of the Act.

"Citizen's enforcement proceeding" means an enforcement action brought before the Board under Section 31(d) of the Act by any person who is not authorized to bring the action on behalf of the People of the State of Illinois.

"Clean Air Act" or "CAA" means the federal Clean Air Act, as now and hereafter

amended (42 USC 7401 et seq.). [415 ILCS 5/39.5]

"Clean Water Act" means the federal Clean Water Act (33 USC 1251 et seq.).

"Clerk" means the Clerk of the Board.

"Clerk's Office On-Line" or "COOL" means the Board's web-based file management system that allows electronic filing of and access to electronic documents in the records of the Board's adjudicatory and regulatory proceedings. COOL is located on the Board's website at <http://www.ipch.state.il.us/COOL/external/>.

"Complaint" means the initial filing that begins an enforcement proceeding under Section 31 of the Act and 35 Ill. Adm. Code 103.

"Compliance plan" means a detailed description of a program designed to achieve compliance with the Act and Board regulations.

"Copy" means *any facsimile, replica, photograph or other reproduction of an article, and any note, drawing or sketch made of or from an article.* [415 ILCS 5/7.1]

"Counter-complaint" means a pleading that a respondent files setting forth a claim against a complainant. (See 35 Ill. Adm. Code 103.206.)

"Cross-complaint" means a pleading that a party files setting forth a claim against a co-party. (See 35 Ill. Adm. Code 103.206.)

"Cross-media impacts" means impacts that concern multiple environmental areas, such as air, land and/or water.

"Decision date" means the date of the Board meeting immediately preceding the decision deadline.

"Decision deadline" means the last day of any decision period, as established by law, within which the Board is required to render a decision in an adjudicatory proceeding. (See Subpart C. See also Sections 38(a), 40, and 40.1 of the Act that establish 120-day decision deadlines for variances, permit appeals, and review of pollution control facility siting decisions respectively.)

"Decision period" means the period of time established by the Act within which the Board is required to make a Board decision in certain adjudicatory proceedings. (See Subpart C. See also Sections 38(a), 40, and 40.1 of the Act that establish 120-day decision deadlines for variances, permit appeals, and review of pollution control facility siting decisions, respectively.)

"Deinked stock" means paper that has been processed to remove inks, clays, coatings, binders and other contaminants. [415 ILCS 20/2.1]

"Delegated unit" means the unit of local government to which the Agency has delegated its administrative citation or other function under Section 4(r) of the Act.

"Digital signature" means a type of electronic signature created by transforming an electronic document using a message digest function and encrypting the resulting transformation with an asymmetric cryptosystem using the signer's private key such that any person having the initial untransformed electronic document, the encrypted transformation, and the signer's corresponding public key can accurately determine whether the transformation was created using the private key that corresponds to the signer's public key and whether the initial electronic document has been altered since the transformation was made. A digital signature is a security device. [5 ILCS 175/5-105]

"Discovery" means a pre-hearing process that can be used to obtain facts and information about the adjudicatory proceeding in order to prepare for hearing. The discovery tools include depositions upon oral and written questions, written interrogatories, production of documents or things, and requests for admission.

"DNR" means the Illinois Department of Natural Resources.

"DOA" means the Illinois Department of Agriculture.

"Duplicative" means the matter is identical or substantially similar to one brought before the Board or another forum.

"Electronic" includes electrical, digital, magnetic, optical, electromagnetic, or any other form of technology that entails capabilities similar to these technologies. [5 ILCS 175/5-105]

"Electronic document" means any notice, information, or filing generated, communicated, received or stored by electronic means to use in an information system or to transmit from one information system to another. (See 5 ILCS 175/5-105.)

"Electronic signature" means a signature in electronic form attached to or logically associated with an electronic document. [5 ILCS 175 5-105]

"Environmental Management System Agreement" or "EMSA" means the agreement between the Agency and a sponsor, entered into under Section 52.3 of the Act and 35 Ill. Adm. Code 187, that describes the innovative environmental measures to be implemented, schedules to attain goals, and mechanisms for accountability.

"Enforcement proceeding" means an adjudicatory proceeding brought upon a complaint filed under Section 31 of the Act by the Attorney General, State's Attorney, or other persons, in which the complaint alleges violation of the Act, any rule or regulation adopted under the Act, any permit or term or condition of a permit, or any Board order.

"EPRR Act" means the Electronic Products Recycling and Reuse Act. [415 ILCS 150]

"Ex parte communication" means *any written or oral communication by any person that imparts or requests material information or makes a material argument regarding potential action concerning regulatory, quasi-adjudicatory, investment, or licensing matters pending before or under consideration by the Board. "Ex parte communication" does not include the following:*

statements by a person publicly made in a public forum, including pleadings, transcripts, public comments, and public remarks made part of the proceeding's record;

statements regarding matters of procedure and practice, such as format, the number of copies required, the manner of filing, and the status of a matter; and

statements made by a State employee of the Board to Board members or other employees of the Board. [5 ILCS 430/5-50(b)] For purposes of this definition, "Board employee" means a person the Board employs on a full-time, part-time, contract or intern basis. (See Section 101.114)

"Fast Track rulemaking" means a Clean Air Act rulemaking conducted under Section 28.5 of the Act.

"Federally required rule" means *a rule that is needed to meet the requirements of the federal Clean Water Act, Safe Drinking Water Act, Clean Air Act (including required submission of a State Implementation Plan), or Resource Conservation and Recovery Act, other than a rule required to be adopted under subsection (c) of Section 13, Section 13.3, Section 17.5, subsection (a) or (d) of Section 22.4, or subsection (a) of Section 22.40. [415 ILCS 5/28.2]*

"Filing" means the act of delivering a document or article into the custody of the Clerk with the intention of incorporating that document or article into the record of a proceeding before the Board. The Clerk's Office is located at 100 West Randolph Street, Suite 11-500, Chicago IL 60601. Electronic filing is done through COOL on the Board's website.

"Final order" means an order of the Board that terminates the proceeding leaving

nothing further to litigate or decide and that is subject to judicial review. (See Subpart I)

"Frivolous" means a request for relief that the Board does not have the authority to grant, or a complaint that fails to state a cause of action upon which the Board can grant relief.

"Hearing" means a public proceeding conducted by a hearing officer where the parties and other interested persons, as provided for by law and the Board's procedural rules, present evidence and argument regarding their positions.

"Hearing officer" means a person licensed to practice law in the State of Illinois who presides over hearings and otherwise carries out record development responsibilities as directed by the Board.

"IAPA" means the Illinois Administrative Procedure Act. [5 ILCS 100]

"Identical-in-substance rules" or "identical-in-substance regulations" means *State regulations which require the same actions with respect to protection of the environment, by the same group of affected persons, as would federal regulations if USEPA administered the subject program in Illinois.* [415 ILCS 5/7.2]

"Initial filing" means the filing that initiates a Board proceeding and opens a docket. For instance, the initial filing in an enforcement proceeding is the complaint; in a permit appeal it is a petition for review; and in a regulatory proceeding it is the proposal.

"Innovative environmental measures" means any procedures, practices, technologies or systems that pertain to environmental management and are expected to improve environmental performance when applied. (See 35 Ill. Adm. Code 106.Subpart G.)

"Inquiry hearing" means a hearing conducted by the Board for the purpose of seeking input and comment from the public regarding the need for a rulemaking proceeding in a specific area.

"Interlocutory appeal" means an appeal of a Board decision to the appellate court that is not dispositive of all the contested issues in the proceeding. (See Section 101.908) An interlocutory appeal may also be the appeal of a hearing officer ruling to the Board. (See Section 101.518.)

"Intervenor" means a person, not originally a party to an adjudicatory proceeding, who voluntarily participates as a party in the proceeding with permission of the Board. (See Section 101.402.)

"Intervention" means the procedure by which a person, not originally a party to an

adjudicatory proceeding, voluntarily comes into the proceeding as a party with the permission the Board. (See Section 101.402.)

"JCAR" means the Illinois General Assembly's Joint Committee on Administrative Rules established by the IAPA (see 5 ILCS 100/5-90).

"Joinder" means the procedure by which the Board adds a person, not originally a party to an adjudicatory proceeding, as a party to the proceeding. (See Section 101.403 and 35 Ill. Adm. Code 103.206.)

"Misnomer" means a mistake in name, giving an incorrect name in a complaint or other document with respect to any properly included party.

"Motion" means a request made to the Board or the hearing officer for the purposes of obtaining a ruling or order directing or allowing some act to be done in favor of the movant. (See definition of "movant" in this Section.)

"Movant" means the person who files a motion.

"New pollution control facility" means *a pollution control facility initially permitted for development or construction after July 1, 1981; or the area of expansion beyond the boundary of a currently permitted pollution control facility; or a permitted pollution control facility requesting approval to store, dispose of, transfer or incinerate, for the first time, any special or hazardous waste.* [415 ILCS 5/3.330(b)]

"Non-disclosable information" means *information which constitutes a trade secret; information privileged against introduction in judicial proceedings; internal communications of the several agencies; information concerning secret manufacturing processes or confidential data submitted by any person under the Act.* [415 ILCS 5/7(a)]

"Notice list" means the list of persons in a regulatory proceeding who will receive all Board opinions and orders and all hearing officer orders. Persons on a notice list generally do not receive copies of motions, public comments, or testimony. (See definition of "service list" in this Section. See also 35 Ill. Adm. Code 102.422.)

"Notice to reinstate" means a document filed that recommences the decision period after a decision deadline waiver has been filed. The notice will give the Board a full decision period in which to make a decision. (See Section 101.308)

"Oral argument" means a formal verbal statement of advocacy on a proceeding's legal questions made at a Board meeting with the Board's permission. (See Section 101.700)

"OSFM" means Office of the State Fire Marshal.

"OSFM appeal" means an appeal of an OSFM final decision concerning eligibility and deductibility made under Title XVI of the Act.

"OSFM record" means a record of final OSFM decision, as kept by the OSFM, of those documents required by the State agency record meeting the applicable requirements of 35 Ill. Adm. Code Part 105.

"Participant" means any person, not including the Board or its staff, who takes part in an adjudicatory proceeding who is not a party, or a person who takes part in a regulatory or other quasi-legislative proceeding before the Board. A person becomes a participant in any of several ways, including filing a comment, being added to the notice list of a particular proceeding, testifying at hearing, or making public remarks at a Board meeting.

~~"Participant in a CAAPP Comment Process" means a person who takes part in a Clean Air Act Permit Program (CAAPP) permit hearing before the Agency or comments on a draft CAAPP permit.~~

"Party" means the person by or against whom an adjudicatory proceeding is brought or who is granted party status by the Board through intervention or joinder.

"Party in interest" means the Agency when asked to conduct an investigation under Section 30 of the Act during an ongoing proceeding. (See Section 101.404)

~~"Peremptory rulemaking" means any rulemaking that is required as a result of federal law, federal rules and regulations, or an order of a court, under conditions that preclude compliance with the general rulemaking requirements of Section 5-40 of the ILPA and that preclude the exercise by the Board as to the content of the rule it is required to adopt. [5 ILCS 100/5-50]~~

"Permit appeal" means an adjudicatory proceeding brought before the Board under Title X of the Act.

"Person" means any individual, partnership, co-partnership, firm, company, limited liability company, corporation, association, joint stock company, trust, estate, political subdivision, state agency, or any other legal entity, or their legal representative, agent or assigns. [415 ILCS 5/3.315]

"Petition" means the initial filing in an adjudicatory proceeding other than an enforcement proceeding, including permit appeals, OSFM appeals, UST appeals, appeals of pollution control facility siting decisions, variances and adjusted standards.

"Pilot project" means an innovative environmental project that covers one or more designated facilities, designed and implemented in the form of an EMSA. (See Section 52.3 of the Act.)

"Pollution control facility" is defined at Section 3.330(a) of the Act for purposes of this Part and 35 Ill. Adm. Code 107.

"Pollution control facility siting appeal" means an appeal of a decision made by a unit of local government filed with the Board under Section 40.1 of the Act.

"Postconsumer material" means *paper, paperboard, and fibrous wastes from retail stores, office buildings, homes, and so forth, after the waste has been passed through its end usage as a consumer item, including used corrugated boxes, old newspapers, mixed waste paper, tabulating cards, and used cordage. Additionally, it includes all paper, paperboard, and other fibrous wastes that are diverted or separated from the municipal solid waste stream.* [415 ILCS 20/3(f)(2)(i) and (ii)] (See also definition of "recycled paper" in this Section.)

"Prehearing conference" means a meeting held in an adjudicatory case to determine the status of the proceedings. A prehearing conference may also be a meeting held in a regulatory proceeding prior to the hearing, the purposes of which shall be *to maximize understanding of the intent and application of the proposal, if possible, and to attempt to identify and limit the issues of disagreement among participants to promote efficient use of time at hearing.* [415 ILCS 5/27(d)] (See 35 Ill. Adm. Code 102.404 and 102.406.)

"Proceeding" means an action conducted before the Board under authority granted under Section 5 of the Act or otherwise provided by law. Board proceedings are of two types: quasi-legislative (rulemaking and inquiry proceedings) and quasi-judicial (adjudicatory proceedings).

"Proponent" means any person, not including the Board or its staff, who submits a regulatory proposal to the Board for the adoption, amendment, or repeal of a regulation.

"Provisional variance" means a short term variance sought by an applicant and issued by the Agency under Section 35(b) of the Act. (See 35 Ill. Adm. Code 104.Subpart C.)

"PSD" means the Prevention of Significant Deterioration of Air Quality program as authorized by Section 9.1(c) of the Act and as adopted by 35 Ill. Adm. Code Part 204.

"PSD permit" means any PSD permit issued, extended or revised pursuant to Section 9.1(c) of the Act and 35 Ill. Adm. Code Part 204.

"PSD permit appeal" means an appeal of a PSD permit as addressed by 35 Ill. Adm. Code Part 105.

"Public comment" means information submitted to the Board during a pending proceeding either by oral statement made at hearing or written statement filed with the Board.

"Public remarks" mean an oral statement that is publicly made at a Board meeting and directed to the Board concerning a proceeding listed on that meeting's agenda. (See Section 101.110(d))

"PWSO Act" means the Public Water Supply Operations Act. [415 ILCS 45]

"Qualitative description" means a narrative description pertaining to attributes and characteristics.

"Quantitative description" means a numerically based description pertaining to attributes and characteristics.

"RCRA variance" means a variance from a RCRA rule or a RCRA permit required under Section 21(f) of the Act.

"Record" means the official collection, as kept by the Clerk, of all documents and exhibits including pleadings, transcripts, and orders filed during the course of a proceeding.

"Recycled paper" means paper which contains at least 50% recovered paper material. The recovered paper material must contain at least 45% deinked stock or postconsumer material. (See also "postconsumer material" in this Section.)

"Regulatory hearing" or "proceeding" means a hearing or proceeding held under Title VII of the Act or other applicable law with respect to regulations.

"Regulatory relief mechanisms" means variances, provisional variances and adjusted standards. (See 35 Ill. Adm. Code 104.)

"Representing" means, for purposes of Part 130, *describing, depicting, containing, constituting, reflecting or recording*. [415 ILCS 5/7.1]

"Requester" means, for purposes of Part 130, the person seeking from the agency the material claimed or determined to be a trade secret (see 415 ILCS 5/7.1).

"Resource Conservation and Recovery Act" or "RCRA" means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq.).

"Responsible Operator in Charge" means an individual who is designated as a Responsible Operator in Charge of a community water supply under Section 1 of the PWSO Act.

"Rulemaking" or "rulemaking proceeding" means a proceeding brought under Title VII of the Act or other applicable law for the purpose of adoption, amendment, or repeal of a regulation.

"Sanction" means a penalty or other mechanism used by the Board to provide incentives for compliance with the Board's procedural rules, Board orders or hearing officer orders. (See also Subpart H)

"SDWA" means the federal Safe Drinking Water Act (42 USC 300f et seq.).

"Service" means delivery of a document upon a person. (See Sections 101.300(c) and 101.304)

"Service list" means the list of persons designated by the hearing officer or Clerk in a regulatory or adjudicatory proceeding upon whom parties or participants must serve motions, prefiled questions and prefiled testimony and any other documents that the parties or participants file with the Clerk unless the hearing officer otherwise directs. (See definition of "notice list" in this Section. See also 35 Ill. Adm. Code 102.422.)

"Severance" means the separation of a proceeding into two or more independent proceedings, each of which terminates in a separate, final judgment.

"Site-specific rule or regulation" means a proposed or adopted regulation, not of general applicability, that applies only to a specific facility, geographic site, or activity. (See 35 Ill. Adm. Code 102.208.)

"Sponsor" means the proponent of a pilot project that enters into an EMSA with the Agency.

"State enforcement proceeding" means an enforcement proceeding, other than a citizen's enforcement proceeding, that is brought under Section 31 of the Act.

"Stay" means a temporary suspension of the regular progress of a proceeding under an order of the Board or by operation of law. (See Section 101.514)

"Subpoena" means a command to appear at a certain time and place to give testimony upon a certain matter.

"Subpoena duces tecum" means a document that compels the production of specific documents and other items at a specified time and place.

"Summary judgment" means the disposition of an adjudicatory proceeding without hearing when the record, including pleadings, depositions and admissions on file, together with any affidavits, shows that there is no genuine issue of material fact, and that the moving party is entitled to judgment as a matter of law. (See Section 101.516)

"Third party complaint" means a pleading that a respondent files setting forth a claim against a person who is not already a party to the proceeding. (See 35 Ill. Adm. Code 103.206.)

"Trade secret" means *the whole or any portion or phase of any scientific or technical information, design, process (including a manufacturing process), procedure, formula or improvement, or business plan which is secret in that it has not been published or disseminated or otherwise become a matter of general public knowledge, and which has competitive value. A trade secret is presumed to be secret when the owner thereof takes reasonable measures to prevent it from becoming available to persons other than those selected by the owner to have access thereto for limited purposes.* [415 ILCS 5/3.490]

"Transcript" means the official recorded testimony from a hearing or public remarks from a Board meeting.

"USEPA" means the United States Environmental Protection Agency.

"Underground storage tank appeal" or "UST appeal" means an appeal of an Agency final decision made under Title XVI of the Act.

"UST" means underground storage tank.

"Variance" means a temporary exemption from any specified regulation, requirement or order of the Board granted to a petitioner by the Board under Title IX of the Act *upon presentation of adequate proof that compliance with the rule or regulation, requirement or order of the Board would impose an arbitrary or unreasonable hardship.* [415 ILCS 5/35(a)]

"Waiver" means the intentional relinquishing of a known right, usually with respect to a hearing before the Board or entry of a Board decision within the decision period. (See also Section 101.308)

"Website" means the Board's computer-based informational and filing service accessed on the Internet at <http://www.ipcb.state.il.us>.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

SUBPART C: COMPUTATION OF TIME, FILING, SERVICE OF DOCUMENTS, AND STATUTORY DECISION DEADLINES

Section 101.300 Computation of Time

- a) **Computation of Time.** Computation of any period of time prescribed in the Act, other applicable law, or this Subpart will begin with the first calendar day following the day on which the act, event or development occurs and will run until the close of business on the last day, or the next business day if the last day is a Saturday, Sunday or national or State legal holiday.
- b) **Date of Filing.** Documents will be considered filed with the Clerk only if they are filed in compliance with Section 101.302 and any other filing requirements specified elsewhere in the Board's procedural rules (see 55 Ill. Adm. Code 101 through 130). Subpart J sets forth when electronic documents submitted to COOL will be considered filed.
- 1) If a document is submitted to the Clerk for filing in person by U.S. Mail, by e-mail or facsimile under Section 101.302(d), or by third-party commercial carrier, the document is considered filed on the date it is received by the Clerk. However, a document received by the Clerk after 4:30 p.m. is considered filed on the next business day. The Clerk will mark the filing date on each filed document.
 - 2) Notwithstanding subsection (b)(1), if the Clerk receives a document by U.S. Mail or third-party commercial carrier after a filing deadline date, the document will be deemed filed on:
 - A) The date the document was provided to the U.S. Postal Service; or
 - B) The date the document was provided to the third-party commercial carrier for delivery to the Clerk within three business days.
 - 3) For purposes of subsection (b)(2), documentation of when the document being filed was provided to the U.S. Postal Service or the third-party commercial carrier consists of the affidavit or certificate required by Section 101.304(d)(2)(A) or (d)(4) and must accompany the document being filed. In addition, for delivery by a third-party commercial carrier, the affidavit or certificate must contain the filing party's representation that the charge for delivery to the Clerk within three business days was prepaid.
 - 4) For purposes of Board decision deadlines, the decision period does not begin until the date marked by the Clerk on the initial filing.
- c) **Date of Service.** Documents will be considered served upon another party only if they are served in compliance with Section 101.304 and any other service requirements specified elsewhere in the Board's procedural rules. The date of

service is determined as follows:

- 1) **Personal Service.** Personal service of a document is complete on the date the document was delivered, as specified in either the affidavit or certificate of service signed by the person who made personal delivery or the declaration of service signed by the process server who made personal delivery.
 - 2) **Service by U.S. Mail or Third-Party Commercial Carrier with Recipient Signature.** If a recipient's signature is recorded by the U.S. Postal Service or a third-party commercial carrier upon delivery of a document, service is complete on the date the document was delivered, as specified in the signed delivery confirmation.
 - 3) **Service by E-Mail or Facsimile.** Service of a document by e-mail or facsimile is complete on the date the document was successfully transmitted, as specified in the affidavit or certificate of service, signed by the party to the proceeding who is serving the document. However, a document successfully e-mailed or faxed on a Saturday or Sunday, on a national or State legal holiday, or after 5:00 p.m. on a weekday is deemed served on the next business day.
 - 4) **Service by U.S. Mail or Third-Party Commercial Carrier without Recipient Signature.** If a recipient's signature is not recorded by the U.S. Postal Service or a third-party commercial carrier upon delivery of a document, service is presumed complete four days after the date the document was provided to the U.S. Postal Service or the third-party commercial carrier.
 - A) The presumption applies only if an affidavit or certificate of service, signed by the party to the proceeding who is serving the document, states the following: the date, the time by when, and the place the document was provided to the U.S. Postal Service or the third-party commercial carrier; the address appearing on the envelope or package containing the document; and that proper postage or the delivery charge was prepaid.
 - B) The presumption can be rebutted by proper proof, which may include delivery tracking information from the website of the U.S. Postal Service or the website of the third-party commercial carrier.
- d) **Date of Board Decision and Date of Service of Final Board Decision.**
- 1) For purposes of statutory decision deadline proceedings, the date of the Board decision is the date of the Board meeting at which a final Board order was adopted.

- 2) For purposes of appealing a final adjudicatory decision of the Board, the date of service of the final decision is the date on which the party receives the Board's certified mailing of the decision. If a motion for reconsideration is timely filed under Section 101.520, the date of service of the final decision is the date on which the party receives the Board's certified mailing of the Board order ruling upon the motion.
- 3) For purposes of appealing a final rulemaking decision of the Board in which a rule is adopted, amended, or repealed, a person is deemed to have been served with the final decision on the date on which the new rule, the amendment, or the repealer becomes effective under the IAPA. For purposes of appealing a final rulemaking decision in which no rule is adopted, amended, or repealed, the date of service of the final decision is the date on which the participant receives the Board's mailing of the decision. If a motion for reconsideration is timely filed under the Board's procedural rules (35 Ill. Adm. Code 102.700 and 102.702), the date of service of the final decision is the date on which the participant receives the Board's mailing of the Board order ruling upon the motion.

(Source: Amended at 41 Ill. Reg. 9937 effective July 1, 2017)

Section 101.302 Filing of Documents

- a) This Section contains the Board's general filing requirements. Additional requirements may exist for specific proceedings elsewhere in the Board's procedural rules (see 35 Ill. Adm. Code 101 through 130). The Clerk will refuse for filing any document that does not comply with the minimum requirements of this Section.
- b) All documents to be filed with the Board must be filed with the Clerk.
 - 1) If allowed by the Board, the hearing officer, the Clerk, or the procedural rules to be filed in paper under subsection (h), documents must be filed at the following address:

Pollution Control Board, Attn: Clerk
100 West Randolph Street
James R. Thompson Center, Suite 11-500
Chicago, Illinois 60601-3218
 - 2) All documents filed with the Clerk must provide the name and signature of the person seeking to file the document and identify the name of the person on whose behalf the document is being filed. If a paper document is submitted for filing, the original must bear the original pen-and-ink signature of the person seeking to file the document. Signatures for

purposes of electronic filings through COOL are addressed in Section 101.1010.

- 3) Each document being filed with the Clerk must be accompanied by a notice of filing (see Appendix D) and documentation of service (see Section 101.304(d)).
 - 4) The date on which a document is considered to have been filed is determined under Section 101.300(b).
 - 5) Service of a document upon a hearing officer does not constitute filing with the Clerk unless the document is submitted to the hearing officer during the course of a hearing.
- c) Electronic documents may be filed through COOL under Subpart J. Paper documents may be filed with the Clerk by U.S. Mail, in person, or by third-party commercial carrier.
 - d) A filing by e-mail or facsimile will only be allowed with the prior approval of the Clerk of the Board or the hearing officer assigned to the proceeding. Any prior approval by the Clerk or hearing officer applies only to the specified filing.
 - e) The initial filings listed in this subsection require filing fees and will only be considered filed when accompanied by the appropriate fee. The fee may be paid in the form of government voucher, money order, or check made payable to the Illinois Pollution Control Board, or electronically through COOL in accordance with Section 101.1040(b)(1), but cannot be paid in cash.
 - 1) Petition for Site-Specific Regulation, \$75;
 - 2) Petition for Variance, \$75;
 - 3) Petition for Review of Agency Permit Decision, UST Decision, or any other appeal filed under Section 40 of the Act, \$75;
 - 4) Petition to Review Pollution Control Facility Siting Decisions, under Section 40.1 of the Act, \$75; and
 - 5) Petition for Adjusted Standard, under Section 28.1 of the Act, \$75.
 - f) For each document filed with the Clerk, the filing party must serve a copy of the document upon the other parties and, if a hearing officer has been assigned, upon the hearing officer in accordance with Section 101.304.
 - g) All documents filed with the Board must contain the relevant proceeding caption and docket number. All documents must be submitted on or formatted to print on

8½ x 11 inch paper, except as provided in subsection (j). Paper documents must be submitted on recycled paper as defined in Subpart B, and double sided. All pages in a document must be sequentially numbered. All documents created by word processing programs must be formatted as follows:

- 1) The margins must each be a minimum one inch on the top, bottom, and both sides of the page; and
 - 2) The size of the type in the body of the text must be no less than 12 point font, and in footnotes no less than 10 point font.
- h) Unless the Board, the hearing officer, the Clerk, or the procedural rules provide otherwise, all documents must be filed through COOL electronically.
- 1) If a document is filed in paper, the original and two copies of the document (three total) are required. If a document is filed through COOL in accordance with Subpart J, no paper original or copy of the document is required.
 - 2) The following documents must be filed through COOL or on compact disk or other portable electronic data storage device, meet the requirements of Section 101.1030(g) and, to the extent technically feasible, in text-searchable Adobe PDF:
 - A) The Agency record required by 35 Ill. Adm. Code 105.212, 105.302, 105.410, or 105.612 or 35 Ill. Adm. Code 125.208 (see 35 Ill. Adm. Code 105.116);
 - B) The OSFM record required by 35 Ill. Adm. Code 105.508 (see 35 Ill. Adm. Code 105.116);
 - C) The local siting authority record required by 35 Ill. Adm. Code 107.302 (see 35 Ill. Adm. Code 107.304); and
 - D) A petition filed under 35 Ill. Adm. Code 104 or 35 Ill. Adm. Code 106 (see 35 Ill. Adm. Code 104.106 and 35 Ill. Adm. Code 106.106)
 - 3) A document containing information claimed or determined to be a trade secret, or other non-disclosable information under 35 Ill. Adm. Code 130, is prohibited from being filed electronically and must instead be filed only in paper. The version of the document that is redacted under 35 Ill. Adm. Code 130 must be filed through COOL.
 - 4) When filing a rulemaking proposal, if any document protected by copyright law (17 USC 101 et seq.) is proposed under Section 5-75 of the

IAPA. [5 ILCS 100/5-75] to be incorporated by reference, the copyrighted document is prohibited from being filed electronically, but the remainder of the rulemaking proposal must be filed through COOL. In addition, the rulemaking proponent must:

- A) File a paper original of the copyrighted document. The rulemaking proposal also must include:
 - i) The copyright owner's written authorization for the Board to make, at no charge to the Board, no more than a total of two paper copies of the copyrighted document if the Board is required by State law to furnish a copy to JCARE, a court, or a member of the public during or after the rulemaking; or
 - ii) The proponent's representation that it will, at its own expense, promptly acquire and deliver to the Clerk's Office no more than a total of two paper originals of the copyrighted document if the Clerk's Office notifies the proponent in writing that the Board is required by State law to furnish a copy to JCARE, a court, or a member of the public during or after the rulemaking; or
 - B) File a license or similar documentation of access that, at no charge to the Board, gives the Board the rights, during and after the rulemaking, to do the following: electronically access the copyrighted document from the sole designated computer at the Board's Chicago office; print a single copy of the copyrighted document to maintain at the Board's Chicago office; and print no more than a total of two copies of the copyrighted document if the Board is required by State law to furnish a copy to JCARE, a court, or a member of the public.
- i) No written discovery, including interrogatories, requests to produce, and requests for admission, or any response to written discovery, may be filed with the Clerk of the Board except with permission or direction of the Board or hearing officer. Any discovery request under these rules to any nonparty must be filed with the Clerk of the Board in accordance with subsection (h).
 - j) Oversized Exhibits. When reasonably practicable, oversized exhibits must be reduced to conform to or be formatted to print on 8½ x 11 inch paper for filing with the Clerk's Office. However, even when an oversized exhibit is so reduced or formatted, the original oversized exhibit still must be filed with the Clerk's Office. In accordance with 2 Ill. Adm. Code 2175.300, the original oversized exhibit may be returned to the person who filed it.

- k) **Page Limitation.** No motion, brief in support of a motion, or brief may exceed 50 pages, and no amicus curiae brief may exceed 20 pages, without prior approval of the Board or hearing officer. These limits do not include appendices containing relevant material; however, materials that may be readily available to the Board, such as prior Board opinions and orders, federal and Illinois regulations, and federal and Illinois statutes, need not be included in appendices.
- l) **Documents filed that do not meet the requirements of 35 Ill. Adm. Code. Subtitle A** may be rejected by the Clerk or the hearing officer. Any rejection of a filing will include a description of the Board's rules that have not been met.

(Source: Amended at 40 Ill. Reg. 7912, effective May 20, 2016)

Section 101.304 Service of Documents

- a) **Service Requirements.** This Section contains the Board's general service requirements. However, the more specific Part for a proceeding type may contain additional requirements.
- b) **Duty to Serve and When to Initiate Service.** A party filing a document with the Clerk under Section 101.300 must also serve one copy of the document upon each of the other parties to the adjudicatory proceeding and, if a hearing officer has been assigned, upon the assigned hearing officer. Service of a document must be initiated concurrently with submitting the document to the Clerk for filing.
 - 1) Service of a document upon a party must be made upon a person authorized by law to receive service on behalf of the party. If a party is represented by an attorney who has filed an appearance, service upon the party is made by serving the document upon the party's attorney. If more than one attorney appears for a party, service upon one of the party's attorneys is sufficient.
 - 2) Each document being served (e.g., enforcement complaint, petition for review) must be accompanied by a notice of filing (see Appendix D) and a copy of the documentation of service (see subsection (d)).
 - 3) The date on which service of a document is considered to have been completed is determined under Section 101.300(c).
 - 4) A proceeding is subject to dismissal, and the filing party is subject to sanctions, if service is not timely initiated or completed.
 - 5) Whether service of a document was proper may be challenged by the party allegedly served. To avoid waiving the right to contest personal jurisdiction, any challenge to service must be made under Section 101.400(a)(5).

c) **Methods of Service.** A document must be served in one of the following ways:

- 1) Except as provided in subsection (c)(2), service of documents may be made by any of the following methods:
 - A) Personal service;
 - B) U.S. Mail;
 - C) Third-party commercial carrier;
 - D) E-mail in accordance with Subpart J; and
 - E) Facsimile, but only if the party being served has filed a notice consenting to receipt of facsimile service and not filed a notice revoking that consent.
- 2) Service of enforcement complaints and EMSA statements of deficiency upon respondents must be made by:
 - A) Personal service;
 - B) U.S. Mail with a recipient's signature recorded by the U.S. Postal Service upon delivery; or
 - C) A third-party commercial carrier with a recipient's signature recorded by the third-party commercial carrier upon delivery.
- 3) Service of administrative citations must be made as required under 35 Ill. Adm. Code 108.

d) **Documentation of Service and When to File Documentation of Service.** A party serving a document upon another party must also file documentation of that service. A proceeding is subject to dismissal, and the filing party is subject to sanctions, if documentation of service is not timely filed with the Clerk. Documenting service and filing that documentation must be done as follows:

- 1) For personal service of a document, either an affidavit or certificate of service signed by the person who made personal delivery or a declaration of service signed by the process server who made personal delivery must accompany the document being filed with the Clerk. However, if the signed affidavit, certificate or declaration is not available to the filing party when the document is filed with the Clerk, the filing must include:

- A) An affidavit or certificate of service, signed by the filing party, stating that service has been initiated, but not yet completed, and the providing the following: the date, the time by when, and the place the document was provided to the person making personal delivery; the address appearing on the envelope or package containing the document; and a statement that the delivery charge was prepaid; and
- B) Within seven days after it becomes available to the filing party, the affidavit or certificate of service containing the signature of the person who made personal delivery or the declaration of service containing the signature of the process server, accompanied by a notice identifying the filed document to which the signed affidavit, certificate or declaration corresponds. A copy of the signed affidavit, certificate, or declaration and the notice must be served under subsection (a).
- 2) For service of a document by U.S. Mail or third-party commercial carrier with a recipient's signature recorded by the U.S. Postal Service or the third-party commercial carrier upon delivery, the delivery confirmation containing the recipient's signature must accompany the document being filed with the Clerk. However, if the delivery confirmation containing the recipient's signature is not available to the filing party when the document is filed with the Clerk, the filing must include:
- A) An affidavit or certificate of service, signed by the filing party, stating that service has been initiated, but not yet completed, and providing the following: the date, the time by when, and the place the document was provided to the U.S. Postal Service or the third-party commercial carrier; the address appearing on the envelope or package containing the document; and a statement that proper postage or the delivery charge was prepaid; and
- B) Within seven days after it becomes available to the filing party, the delivery confirmation containing the recipient's signature, accompanied by a notice identifying the filed document to which the signed delivery confirmation corresponds. A copy of the delivery confirmation and the notice must be served under subsection (a).
- 3) For service of a document by e-mail or facsimile, an affidavit or certificate of service must accompany the document being filed with the Clerk. An affidavit or certificate of e-mail service must comply with Section 101.1060. An affidavit or certificate of facsimile service must include the date and time of the facsimile transmission, the telephone number to

which the transmission was sent, the number of pages transmitted, and a statement that the document was served by facsimile.

- 4) For service of a document by U.S. Mail or a third-party commercial carrier without a recipient's signature recorded by the U.S. Postal Service or the third-party commercial carrier upon delivery, an affidavit or certificate of service must accompany the document being filed with the Clerk. The affidavit or certificate must state the following: the date, the time by when, and the place the document was provided to the U.S. Postal Service or the third-party commercial carrier; the address appearing on the envelope or package containing the document; and that proper postage or the delivery charge was prepaid.
- 5) An affidavit of service must be notarized and is for use by a non-attorney. A certificate of service is for use by an attorney. Sample forms of an affidavit of service and a certificate of service are available in Appendices E and H.
- 6) A certificate of service must bear an attorney's signature. Signatures in affidavits of service, declarations of service, and delivery confirmations must be written by hand. A handwritten signature in documentation of service filed with the Clerk may be a facsimile or digitized electronic signature.
- e) Service of Amicus Curiae Briefs. Any person who files an amicus curiae brief with the Board in any proceeding must serve copies of that brief on all parties in accordance with this Section.
- f) Service of Comments of Participants in an Adjudicatory Proceeding. Participants are required to serve comments upon the parties to the proceeding. The Board will consider the comments as time and the Act or other applicable law allow.
- g) Service on Agencies. Service must be at the addresses listed below unless a specific person has an appearance on file with the Board or has, in accordance with Section 101.1070, consented to e-mail service.
 - 1) Service on the Illinois Environmental Protection Agency. The Agency must be served at:

Division of Legal Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield IL 62794-9276
epa.dlc@illinois.gov

- 2) Service on Office of State Fire Marshal. The OSFM must be served at:

Division of Petroleum and Chemical Safety
Office of the State Fire Marshal
1035 Stevenson Dr.
Springfield IL 62703

- 3) Service on the Illinois Attorney General. The Office of the Attorney General must be served at:

Division Chief of Environmental Enforcement
Office of the Attorney General
100 West Randolph St., Suite 1200
Chicago IL 60601
enviro@atg.state.il.us

- 4) Service on the Illinois Department of Natural Resources. DNR must be served at:

Office of Legal Services
Illinois Department of Natural Resources
One Natural Resources Way
Springfield IL 62702-4371

- 5) Service on the Illinois Department of Transportation. IDOT must be served at:

Office of Chief Counsel
DOT Administration Building
1400 S. Dirksen Parkway, Room 300
Springfield IL 62764

- 6) Service on Region V of the United States Environmental Protection Agency. USEPA Region V must be served at:

USEPA, Region V
17 West Jackson
Chicago IL 60604

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.306 Incorporation of Documents from Another Proceeding

- a) Upon the separate written request of any person or on its own initiative, the Board or hearing officer may incorporate materials from the record of another Board docket into any proceeding. The person seeking incorporation must file the

material to be incorporated with the Board in accordance with Section 101.302(h). The person seeking incorporation must demonstrate to the Board or the hearing officer that the material to be incorporated is authentic, credible, and relevant to the proceeding. Notice of the request must be given to all identified participants or parties by the person seeking incorporation.

- b) The Board will give the incorporated matter the appropriate weight in light of the following factors: the standard of evidence under which the material was previously presented to the Board; the present purpose for incorporating the material; and the past and current opportunity for cross-examination of the matters asserted within the incorporated material.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.308 Statutory Decision Deadlines and Waiver of Deadlines

- a) Petitions in the following proceedings each have a 120-day statutory decision deadline: Variances (Section 38 of the Act), Permit Appeals and UST appeals (Section 40 of the Act), and Pollution Control Facility Siting Review (Section 40.1 of the Act). CAAPP permit appeals (Section 40.2 of the Act), and PSD permit appeals (Section 40.3 of the Act). Other adjudicatory proceedings may be subject to decision deadlines as provided by law.
- b) Where the petitioner does not waive the decision deadline, the Board will proceed expeditiously to establish all hearing and filing requirements. Willful or unexcused failure to follow Board requirements on the deadlines will subject the party to sanctions under Subpart H. This Section will be strictly construed where there is a decision deadline unless the Board receives a waiver as set out in subsection (c).
- c) All waivers of a deadline for Board action must be filed as a separate document. Waivers must be titled and state which type of waiver it is, identify the proceeding by name and docket number, and be signed by the party or by an authorized representative or attorney. A waiver of a statutory deadline does not preclude the Board from issuing an opinion or order prior to any decision deadline, nor does it preclude the filing of a motion seeking a decision on the matter.
 - 1. An open waiver waives the decision deadline completely and unequivocally until the petitioner elects to reinstate the 120-day decision period by filing a notice to reinstate. Upon proper filing of the notice, the decision period is reinstated. In accordance with Section 101.300(b)(4), the decision period recommences as of the date the notice to reinstate is filed with the Board.

- 2) A time certain waiver must be expressed in length of days or to a specific calendar date. If expressed in length of days, day one will be the first day after the date upon which the current time clock expires. If the petitioner files a time certain waiver before the hearing date, the waiver must be for at least 40 days. If the extension is not renewed for at least 40 days prior to the decision deadline, the Board will set the matter for hearing.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

SUBPART D: PARTIES, JOINDER, AND CONSOLIDATION

Section 101.400 Appearances, Withdrawals, and Substitution of Attorneys in Adjudicatory Proceedings

- a) **Appearances.** A person who is a party in a Board adjudicatory proceeding may appear as follows:
 - 1) Individuals may appear on their own behalf or through an attorney-at-law licensed and registered to practice law. (See Section 1 of the Attorney Act. [705 ILCS 205/1])
 - 2) When appearing before the Board, any person other than individuals must appear through an attorney-at-law licensed and registered to practice law. (See Section 1 of the Corporation Practice of Law Prohibition Act. [705 ILCS 220/1] and Section 1 of the Attorney Act.
 - 3) An out-of-state attorney may appear as counsel and provide legal services in a particular proceeding before the Board only if the attorney has permission to do so under Illinois Supreme Court Rule 707. No Board order is required for an out-of-state attorney to appear and no motion to appear pro hac vice is necessary. The out-of-state attorney's appearance must include the following:
 - A) A representation that the out-of-state attorney is in, and will maintain throughout the proceeding, compliance with Supreme Court Rule 707; and
 - B) Identification of the active status Illinois attorney associated with the out-of-state attorney under Supreme Court Rule 707 and the date on which the active status Illinois attorney filed an appearance in the proceeding.
 - 4) Any attorney appearing in a representative capacity must file a separate written appearance with the Clerk, together with documentation of service of the appearance under Section 101.304(d) and notice of filing of the appearance under Section 101.304(b)(2). The appearance must include:

- A) For law firms, the Agency, and the Attorney General's Office, a lead attorney must be designated for purposes of phone and mail contact pertaining to the proceeding. Absent written notice, the Board will designate the attorney whose signature appears first on the party's first filing as the lead attorney.
- B) The attorney's business address and designation of a primary e-mail address for service by e-mail. Up to two secondary e-mail addresses may also be included.
- 5) Any person seeking to contest personal jurisdiction must do so by filing a motion with the Board in accordance with Section 2-301 of the Code of Civil Procedure. [735 ILCS 5/2-301]
- b) Withdrawals. An attorney who has appeared in a representative capacity and who wishes to withdraw from that representation must file a notice of withdrawal with the Clerk, together with documentation of service and notice of filing on all parties or their representatives.
- c) Substitution. Any attorney who substitutes for an attorney of record must file a written appearance under subsection (a). That appearance must identify the attorney for whom the substitution is made. However, no attorney will be considered withdrawn from a proceeding until a formal withdrawal is filed in accordance with subsection (b).
- d) Any person may appear on behalf of himself or others in a rulemaking proceeding in accordance with 35 Ill. Adm. Code 102.100(b).

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.402 Intervention of Parties

- a) The Board may permit any person to intervene in any adjudicatory proceeding. If a person seeks to intervene in an adjudicatory proceeding, the person must file a motion to do so with the Clerk and serve a copy of the motion on all parties to the proceeding. The motion must set forth the grounds for intervention.
- b) In determining whether to grant a motion to intervene, the Board will consider the timeliness of the motion and whether intervention will unduly delay, materially prejudice, or otherwise interfere with an orderly or efficient proceeding.
- c) Subject to subsection (b), the Board will permit any person to intervene in any adjudicatory proceeding if:

- 1) The person has an unconditional statutory right to intervene in the proceeding; or
 - 2) It may be necessary for the Board to impose a condition on the person.
- d) Subject to subsection (b), the Board may permit any person to intervene in any adjudicatory proceeding if:
- 1) The person has a conditional statutory right to intervene in the proceeding;
 - 2) The person may be materially prejudiced absent intervention; or
 - 3) The person is so situated that the person may be adversely affected by a final Board order.
- e) An intervenor will have all the rights of an original party to the adjudicatory proceeding, except that the Board may limit the rights of the intervenor as justice may require. The limits may include providing that: the intervenor is bound by Board and hearing officer orders already issued or by evidence already admitted; that the intervenor does not control any decision deadline; and that the intervenor cannot raise issues that were raised or might more properly have been raised at an earlier stage of the proceeding.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.403 Joinder of Parties

- a) The Board, on its own motion or the motion of any party, may add a person as a party to any adjudicatory proceeding if:
 - 1) A complete determination of a controversy cannot be had without the presence of the person who is not already a party to the proceeding;
 - 2) The person who is not already a party to the proceeding has an interest that the Board's order may affect; or
 - 3) It may be necessary for the Board to impose a condition on the person who is not already a party to the proceeding.
- b) The Board will not dismiss an adjudicatory proceeding for misjoinder of parties. The Board will not dismiss an adjudicatory proceeding for nonjoinder of persons who must be added to allow the Board to decide an action on the merits without first providing a reasonable opportunity to add the persons as parties. As justice may require, the Board may add new parties and dismiss misjoined parties at any stage of an adjudicatory proceeding.

Section 101.404 Agency as a Party in Interest

Under Section 30 of the Act, the Board may request that the Agency investigate any alleged violation of the Act, the regulations, any permit granted by the Agency, or any term or condition of any such permit and any such other investigations as the Board may deem advisable. Upon such request, the Board may designate the Agency as a party in interest in any ongoing proceeding in that matter. The designation of the Agency as a party in interest does not require the Agency to take a position on the merits of the proceeding.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.406 Consolidation of Claims

The Board, upon the motion of any party or upon its own motion, may consolidate two or more proceedings for the purpose of hearing or decision or both. The Board will consolidate the proceedings if consolidation is in the interest of convenient, expeditious, and complete determination of claims, and if consolidation would not cause material prejudice to any party. The Board will not consolidate proceedings where the burdens of proof vary.

Section 101.408 Severance of Claims

Upon motion of any party or on the Board's own motion, in the interest of convenient, expeditious, and complete determination of claims, and where no material prejudice will be caused, the Board may sever claims involving any number of parties.

SUBPART E: MOTIONS**Section 101.500 Filing of Motions and Responses**

- b) The Board may entertain any motion the parties wish to file that is permissible under the Act or other applicable law, these rules, or the Illinois Code of Civil Procedure.
- b) All motions must be in writing, unless made orally on the record during a hearing or during a status conference, and must state whether directed to the Board or to the hearing officer. Oral motion to the Board made at hearing must be filed in writing within 14 days after the hearing or the motion is deemed waived. Motions that should be directed to the hearing officer are set out in Section 101.502. All motions must be filed and served in conformance with Subparts C and J.
- c) Motions may be filed at any time unless otherwise specifically provided.
- d) Within 14 days after service of a motion, a party may file a response to the motion. If no response is filed, the party will be deemed to have waived objection to the granting of the motion, but the waiver of objection does not bind the Board or the hearing officer in its disposition of the motion. Unless undue delay or

material prejudice would result, neither the Board nor the hearing officer will grant any motion before expiration of the 14 day response period except in deadline driven proceedings where no waiver has been filed. Parties may request that the Board grant more time to respond by filing a motion for extension of time.

- e) The moving person will not have the right to reply, except as permitted by the Board or the hearing officer to prevent material prejudice. A motion for permission to file a reply must be filed with the Board within 14 days after service of the response.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.502 Motions Directed to the Hearing Officer

- a) The hearing officer has the authority to rule on all motions that are not dispositive of the proceeding. Dispositive motions include motions to dismiss, motions to decide a proceeding on the merits, motions to strike any claim or defense for insufficiency or want of proof, motions claiming lack of jurisdiction, motions for consolidation, motions for summary judgment and motions for reconsideration. Oral motions directed to a hearing officer at a status conference will be summarized in a written hearing officer order. The duties and authorities of the hearing officer are further set out in Section 101.610.
- b) An objection to a hearing officer ruling made at hearing will be deemed waived if not filed within 14 days after the Board receives the hearing transcript.
- c) Unless otherwise ordered by the Board, neither the filing of a motion, nor any appeal to the Board of a hearing officer order will stay the proceeding or extend the time for the performance of any act. Unless otherwise provided, all hearing officer orders will remain in effect during the pendency of any appeal to the Board.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.504 Contents of Motions and Responses

All motions and responses must state the grounds upon which the motion is made and must contain a concise statement of the position or relief sought. Facts asserted that are not of record in the proceeding must be supported by oath, affidavit, or certification in accordance with Section 1-109 of the Code of Civil Procedure [735 ILCS 5/1-109]. A brief or memorandum in support of the motion or response may be included.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.506 Motions Attacking the Sufficiency of the Petition, Complaint, or Other Pleading

All motions to strike, dismiss, or challenge the sufficiency of any pleading filed with the Board must be filed within 30 days after the service of the challenged document, unless the Board determines that material prejudice would result.

Section 101.508 Motions to Board Preliminary to Hearing

Motions that a party desires the Board to rule on before hearing should be filed 21 days prior to the regularly scheduled Board meeting before the noticed hearing date. Any motion filed after the above prescribed time will be considered by the Board if time permits.

Section 101.510 Motions to Cancel Hearing

- a) Time to File. Unless the Board or the hearing officer orders otherwise the hearing officer may grant motions to cancel hearings that are filed no fewer than 10 days or, if all parties agree to the motion, 5 days before the scheduled hearing date. The hearing officer may grant a motion filed after the prescribed time only if the movant demonstrates that the movant will suffer material prejudice if the hearing is not canceled.
- b) Contents. All motions to cancel a hearing must set forth a proposed date to reschedule the hearing and must be supported by an affidavit of the person or persons with knowledge of the facts that support the motion. The affidavit must include the factual basis for the request to cancel and a complete status report that describes the progress of the proceeding and sets forth the number of cancellation requests previously granted to the movant. The hearing officer will grant the motion only if the movant demonstrates that the request to cancel is not the result of the movant's lack of diligence.
- c) In a proceeding for which there is a decision deadline, the hearing officer will deny a motion to cancel a hearing if the decision deadline does not allow enough time for the Board to reschedule the hearing, provide the required notice of the rescheduled hearing, complete the hearing, and deliberate and decide the matter.
- d) If the hearing officer grants a motion to cancel a hearing, the hearing officer will revise the schedule to complete the record in accordance with Section 101.612. The hearing officer also will file the revised schedule with the Clerk and serve a copy of the revised schedule on all parties in accordance with Subpart C.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.512 Motions for Expedited Review

- a) Motions for expedited review must be directed to the Board. All motions for expedited review must contain a complete statement of the facts and reasons for the request and must be accompanied by an oath or affirmation attesting that the facts cited are true.
- b) In acting on a motion for expedited review, the Board will, at a minimum, consider all statutory requirements and whether material prejudice will result from the motion being granted or denied.
- c) The Board will grant a motion for expedited review consistent with available resources and decision deadlines.

Section 101.514 Motions to Stay Proceedings

- a) Motions to stay a proceeding must be directed to the Board and must be accompanied by sufficient information detailing why a stay is needed, and in decision deadline proceedings, by a waiver of any decision deadline. A status report detailing the progress of the proceeding must be included in the motion. (See also Section 101.308.)
- b) If the motion to stay is granted at the close of the stay, the parties must file a status report in accordance with Subpart C. Additional requests for stay of the proceedings must be directed to the hearing officer.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.516 Motions for Summary Judgment

- a) Any time after the opposing party has appeared (or after the expiration of time within which any party is required to appear), but no fewer than 30 days prior to the regularly scheduled Board meeting before the noticed hearing date, a party may move the Board for summary judgment for all or any part of the relief sought. Any response to a motion for summary judgment must be filed within 14 days after service of the motion for summary judgment. The hearing officer may extend the filing and response deadlines contained in this subsection upon written motion by a party, consistent with any statutory deadlines.
- b) If the record, including pleadings, depositions and admissions on file, together with any affidavits, shows that there is no genuine issue of material fact, and that the moving party is entitled to judgment as a matter of law, the Board will enter summary judgment.
- c) Any party wishing to cancel a hearing pending decision on a motion for summary judgment must file a motion to cancel hearing under Section 101.510.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.518 Motions for Interlocutory Appeal from Hearing Officer Orders

Interlocutory appeals from a ruling of the hearing officer may be taken to the Board by filing a motion within 14 days after receipt of the hearing officer's written order. However, if the hearing officer's ruling is rendered on the record at hearing, any motion for interlocutory appeal must be filed within 14 days after the hearing. Filing a motion for interlocutory appeal will not postpone a scheduled hearing, stay the effect of the hearing officer's ruling, or otherwise stay the proceeding. Failure of a party to timely file a motion for interlocutory appeal constitutes a waiver of any objection to the hearing officer's ruling.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.520 Motions for Reconsideration

- a) Any motion for reconsideration or modification of a Board order must be filed within 35 days after the receipt of the order. (See Section 101.902.)
- b) Any response to a motion for reconsideration or modification must be filed within 14 days after the filing of the motion.
- d) A timely-filed motion for reconsideration or modification stays the effect of the order until final disposition of the motion in accordance with Section 101.300(d)(2).

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.522 Motions for Extension of Time

The Board or hearing officer, for good cause shown on a motion after notice to the opposite party, may extend the time for filing any document or doing any act which is required by these rules to be done within a limited period, either before or after the expiration of time.

SUBPART F: HEARINGS, EVIDENCE, AND DISCOVERY**Section 101.600 Hearings**

- a) All hearings are open to the public and are held in compliance with the Americans with Disabilities Act of 1990 (42 USC 12101 et seq.). The hearings will be held at locations ordered by the hearing officer. The hearing officer will select hearing locations that comply with any geographic requirements imposed by applicable law and, to the extent feasible, promote the attendance of interested members of the public, the convenience of the parties, and the conservation of the Board's resources. All hearings are subject to cancellation without notice. Interested persons may contact the Clerk's Office or the hearing officer for information

about the hearing. Parties, participants, and members of the public must conduct themselves with decorum at the hearing.

- b) Any Board hearing may be held by videoconference. Upon its own motion or the motion of any party, the Board or the hearing officer may order that a hearing be held by videoconference. In deciding whether a hearing should be held by videoconference, factors that the Board or the hearing officer will consider include cost-effectiveness, efficiency, facility accommodations, witness availability, public interest, the parties' preferences, and the proceeding's complexity and contentiousness.

(Source: Amended at 40 Ill. Reg. 7912, effective May 20, 2016)

Section 101.602 Notice of Board Hearings

- a) The hearing officer will give the parties at least 21 days written notice of a hearing.
- b) The Clerk will provide notice of all hearings except for administrative citation hearings, in a newspaper of general circulation in the county in which the facility or pollution source is located or where the activity in question occurred. Unless otherwise required by applicable law, when a hearing is to be held to satisfy the public hearing requirement of the Clean Air Act (42 USC 7401 *et seq.*) for State Implementation Plan revisions, the Clerk will give notice of the hearing by publication in the Illinois Register in lieu of newspaper notice. Notice must be published at least 21 days before the hearing. If the proceeding involves federal rules that the State has been delegated authority to administer, notice must be published at least 30 days before the hearing.
- c) *When a proceeding before the Board may affect the right of the public individually or collectively to the use of community sewer or water facilities provided by a municipally owned or publicly regulated company, the Board shall at least 30 days prior to the scheduled date for the first hearing in the proceeding, give notice of the date, time, place, and purpose of the hearing by public advertisement in a newspaper of general circulation in the area of the State concerned [415 ILCS 5/33(c)].*

(Source: Amended at 40 Ill. Reg. 7912, effective May 20, 2016)

Section 101.604 Formal Board Transcript

All Board hearings will be transcribed by a certified court reporter in accordance with Section 32 of the Act or other applicable law. Any party or witness may file a motion with the hearing officer to correct the transcript within 21 days after receipt of the transcript in the Clerk's Office. Failure of any party or witness to timely file a motion to correct the transcript constitutes a waiver of the right to correct, unless material prejudice results.

Section 101.606 Informal Recordings of the Proceedings

Informal recording of Board proceedings is allowed as provided for in this Section. The hearing officer may prohibit audio or video recording at hearing if a witness refuses to testify on the grounds that the witness may not be compelled to testify if any portion of the testimony is to be broadcast or televised. If the hearing officer determines that recording is disruptive or detrimental to proper development of the record, the hearing officer may limit or prohibit audio and/or video recording.

Section 101.608 Default

- a) Failure of a party to appear at the hearing, or failure to proceed as ordered by the Board or hearing officer, will constitute default.
- b) If a respondent fails to appear at hearing, the complainant or petitioner must prove its prima facie case in order to prevail on the merits.

Section 101.610 Duties and Authority of the Hearing Officer

The hearing officer has the duty to manage proceedings assigned, to set hearings, to conduct a fair hearing, to take all necessary action to avoid delay, to maintain order, and to ensure development of a clear, complete, and concise record for timely transmission to the Board. The hearing officer has all powers necessary to these ends, including the authority to:

- a) Require parties to proceed to hearing and establish a schedule for, and notice and service of, any prefiled submission of testimony and written exhibits;
- b) Administer oaths and affirmations;
- c) Allow for the examination of or examine witnesses to ensure a clear and complete record;
- d) Regulate the course of the hearing, including controlling the order of proceedings;
- e) Establish reasonable limits on the duration of the testimony and questioning of any witness, and limit repetitive or cumulative testimony and questioning;
- f) Determine that a witness is adverse, hostile, or unwilling under Section 101.624;
- g) Issue an order compelling the answers to interrogatories or responses to other discovery requests;
- h) Order the production of evidence under Section 101.614;

- i) Order the filing of any required Agency record, OSFM record, local siting authority record or recommendation in a manner which provides for a timely review and development of issues prior to the hearing and consistent with any statutory decision deadline;
- j) Initiate, schedule, and conduct a pre-hearing conference;
- k) Order a briefing and comment schedule and exclude late-filed briefs and comments from the record;
- l) Rule upon objections and evidentiary questions;
- m) Order discovery under Sections 101.614 and 101.615;
- n) Rule on any motion directed to the hearing officer or deferred to the hearing officer by the Board in accordance with Section 101.502;
- o) Set status report schedules;
- p) Require all participants in a rulemaking proceeding to state their positions with respect to the proposal; and
- q) Rule upon offers of proof and receive evidence and rule upon objections to the introduction of evidence.

(Source: Amended 61 Ill. Reg. 9930, effective July 5, 2017)

Section 101.612 Schedule to Complete the Record

- a) The hearing officer must establish a schedule to complete the record by hearing officer order. The schedule may provide dates and deadlines for pre-hearing conferences, discovery completion, and hearing and post-hearing submissions (including public comments). The schedule must provide for a completed record at least 30 days before the decision date, unless the hearing officer orders otherwise to prevent material prejudice. The hearing officer must file the schedule with the Clerk and serve a copy of the schedule on all parties in accordance with Subpart C.
- b) The hearing officer may rule upon any motion to revise the schedule to complete the record. The hearing officer may grant the motion to the extent that the revised schedule provides for a completed record at least 30 days before the decision date or to prevent material prejudice. If the hearing officer grants a motion to revise the schedule, the hearing officer must file the revised schedule with the Clerk and serve a copy of the revised schedule on all parties in accordance with Subpart C. (See also Section 101.510(d).)

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.614 Production of Information

The hearing officer may, on his or her own motion or on the motion of any party, order the production of information that is relevant to the matter under consideration. The hearing officer will deny, limit or condition the production of information when necessary to prevent undue delay, undue expense, or harassment, or to protect materials from disclosure consistent with Sections 7 and 7.1 of the Act and 35 Ill. Adm. Code 130.

Section 101.616 Discovery

The assigned hearing officer will set all time deadlines for discovery not already provided for in this Subpart consistent with Board deadlines. For purposes of discovery, the Board may look to the Code of Civil Procedure and the Supreme Court Rules for guidance where the Board's procedural rules are silent (see Section 101.100(b)). All discovery disputes will be handled by the assigned hearing officer.

- a) All relevant information and information calculated to lead to relevant information is discoverable, excluding those materials that would be protected from disclosure in the courts of this State under statute, Supreme Court Rules or common law, and materials protected from disclosure under 35 Ill. Adm. Code 130.
- b) If the parties cannot agree on the scope of discovery or the time or location of any deposition, the hearing officer has the authority to order discovery or to deny requests for discovery.
- c) All discovery must be completed at least 10 days prior to the scheduled hearing in the proceeding unless the hearing officer orders otherwise.
- d) The hearing officer may, on his or her own motion or on the motion of any party or witness, issue protective orders that deny, limit, condition or regulate discovery to prevent unreasonable expense, or harassment, to expedite resolution of the proceeding, or to protect non-disclosable materials from disclosure consistent with Sections 7 and 7.1 of the Act and 35 Ill. Adm. Code 130.
- e) Unless a claim of privilege is asserted, it is not a ground for objection that the testimony of a deponent or person interrogated will be inadmissible at hearing, if the information sought is reasonably calculated to lead to relevant information. Any appeals of rulings by the hearing officer regarding discovery must be in writing and filed with the Board prior to hearing.
- f) Failure to comply with any order regarding discovery may subject the offending persons to sanctions under Subpart H.

- g) If any person serves any request for discovery or answers to discovery for any improper purpose, such as to harass or to cause unnecessary delay or needless increase in the cost of litigation, or knowingly gives a false answer to discovery questions, the Board, on its own motion or the motion of a party, may impose sanctions under Subpart H.
- h) A party must amend any prior responses to interrogatories, requests for production, or requests for admission if the party learns that the response is in some material respect incomplete or incorrect, and the additional or corrected information has not otherwise been made known to the other parties during the discovery process or in writing.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.618 Admissions

- a) General. All requests to admit must be served upon a party no later than 35 days before hearing. All answers or objections to requests to admit must be served upon the party requesting the admission within 28 days after the service of the request.
- b) Extension of Time. In accordance with Sections 101.522 and 101.610 the hearing officer may extend the time for filing any request, answer, or objection either before or after the expiration of time.
- c) Request to Admit. Any party serving a request to admit in accordance with subsection (a) or (e) must include the following language in the first paragraph of the request: "Failure to respond to the following requests to admit within 28 days may have severe consequences. Failure to respond to the following requests will result in all the facts requested being deemed admitted as true for this proceeding. If you have any questions about this procedure, you should contact the hearing officer assigned to this proceeding or an attorney."
- d) Request for Admission of Fact. A party may serve a written request for admission of the truth of specific statements of fact on any other party.
- e) Request for Admission of Genuineness of Document. A party may serve a written request for admission of the genuineness of documents on any other party. Copies of the document must be served unless the document has already been furnished in the present proceeding.
- f) Admission in the Absence of Denial. Each of the matters of fact and the genuineness of each document of which admission is requested is admitted unless, within 28 days after service, the party to whom the request is directed serves upon the party requesting the admission either a sworn statement denying specifically the matters of which admission is requested or setting forth in detail the reasons

why the party cannot truthfully admit or deny those matters, or written objections on the ground that some or all of the requested admissions are privileged or irrelevant or that the request is otherwise improper in whole or in part. If written objections to a part of the request are made, the remainder of the request must be answered within the period designated in the request. A denial must fairly address the substance of the requested admission.

- g) **Partial Denial or Qualification.** If good faith requires that a party deny a part of a matter for which an admission is requested, or if a part requires qualification, the party must specify the part which is denied or qualified and admit only the remainder.
- h) **Objection.** Any objection to a request or to any answer must be stated with specificity, and will be heard by the hearing officer upon notice and motion of the party making the request.
- i) **Effect of Admission.** Any admission made by a party under a request under this Section is for the purpose of the pending proceeding only. It does not constitute an admission by the party for any other purpose and may not be used against him in any other proceeding.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.620 Interrogatories

- a) Unless ordered otherwise by the hearing officer, a party may serve a maximum of 30 written interrogatories, including subparts, on any other party, no later than 35 days before hearing.
- b) Within 28 days after service, the party to whom the interrogatory is directed must serve the answers and objections, if any, upon the party submitting the interrogatories. Each interrogatory must be answered separately and fully in writing under oath, unless it is objected to. Answers must be signed by the person making them and objections must be signed by the attorney making them or, in the event of an individual representing himself or herself, the individual making them.
- c) Grounds for an objection to an interrogatory must be stated with specificity, and be accompanied by a copy of the interrogatory. Any ground that is not stated in a timely objection is waived unless it results in material prejudice or good cause for the delay is shown.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.622 Subpoenas and Depositions

- a) Upon request by any party to a contested proceeding, the Clerk will issue subpoenas for the attendance of witnesses at a hearing or deposition. Subpoena forms are available at the Board's Chicago office. The person requesting the subpoena is responsible for completing the subpoena and serving it upon the witness.
- b) Service of the subpoena on the witness must be completed no later than 10 days before the date of the required appearance. A copy of the subpoena must be filed with the Clerk and served upon the hearing officer within 7 days after service upon the witness. Failure to serve both the Clerk and the hearing officer will render the subpoena null and void. Service and filing must be in accordance with Subpart C.
- c) Subpoenas may include a command to produce books, papers, documents, or other tangible things designated therein and relevant to the matter under consideration.
- d) The hearing officer, upon motion made promptly and in any event at or before the time specified in the subpoena for compliance, may quash or modify the subpoena if it is unreasonable or irrelevant. The hearing officer will rule upon motions to quash or modify material requested in the subpoena under subsection (c) in accordance with the standards articulated in Section 101.614.
- e) Each witness subpoenaed by a party under this Section is entitled to receive witness fees from that party as provided in Section 4.3 of the Circuit Courts Act. [705 ILCS 38.4.3]
- f) Unless the hearing officer orders otherwise, any witness subpoenaed for a deposition may be required to attend only in the county in which he resides or maintains an office address. In accordance with Supreme Court Rule 206(d), all depositions must be limited to 3 hours in length unless the parties and the non-party deponent by stipulation agree to a longer time frame or unless the hearing officer orders otherwise after a showing of good cause. (See Ill. S. Ct. Amended Rule 206(d).)
- g) Failure of any witness to comply with a subpoena will subject the witness to sanctions under this Part, or the judicial enforcement of the subpoena. The Board may, upon proper motion by the party requesting the subpoena, request the Attorney General to pursue judicial enforcement of the subpoena on behalf of the Board.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.624 Examination of Adverse, Hostile or Unwilling Witnesses

- a) **Adverse Witnesses.** At hearing, upon motion granted by the hearing officer, any party, or any person for whose immediate benefit the proceeding is prosecuted or defended, or any officers, directors, managing agents, or foremen of any party may be called as an adverse witness as allowed by the Code of Civil Procedure. (See Section 2-1102 of the Code of Civil Procedure.) Adverse witnesses may be examined as if under cross-examination. The party calling the adverse witness may rebut the testimony and may impeach the witness.
- b) **Hostile or Unwilling Witnesses.** If the hearing officer determines that any witness is hostile or unwilling, the witness may be examined by the party calling the witness as if under cross-examination.

Section 101.626 Information Produced at Hearing

In accordance with Section 10-40 of the IAPA, the hearing officer will admit evidence that is admissible under the rules of evidence as applied in the civil courts of Illinois, except as otherwise provided in this Part or 35 Ill. Adm. Code Part 105.

- a) **Evidence.** The hearing officer may admit evidence that is material, relevant, and would be relied upon by prudent persons in the conduct of serious affairs, unless the evidence is privileged.
- b) **Admissibility of Evidence.** When the admissibility of evidence depends upon a good faith argument as to the interpretation of substantive law, the hearing officer will admit the evidence.
- c) **Scientific Articles and Treatises.** Relevant scientific or technical articles, treatises, or materials may be introduced into evidence by a party. The materials are subject to refutation or disputation through introduction of documentary evidence or expert testimony.
- d) **Written Testimony.** Written testimony may be introduced by a party in a hearing only if provided to all other parties of record prior to the date of the hearing and only after the opposing parties have had an opportunity to object to the written testimony and to obtain a ruling on the objections prior to its introduction. Written testimony may be introduced by a party only if the persons whose written testimony is introduced are available for cross-examination at hearing.
- e) **Admission of Business Records.** A writing or record, whether in the form of any entry in a book or otherwise made as a memorandum or record of any act, transaction, occurrence, or event, may be admissible as evidence of the act, transaction, occurrence, or event. To be admissible, the writing or record must have been made in the regular course of business, provided it was the regular course of business to make the memorandum or record at the time of the act, transaction, occurrence, or event, or within a reasonable time afterwards. All other circumstances of the making of the writing or record, including lack of

personal knowledge by the entrant or maker, may be admitted to affect the weight of the evidence, but will not affect admissibility. The term "business," as used in this subsection (e), includes businesses, professions, occupations, and callings of every kind.

- f) **Prior Inconsistent Statements.** Prior statements made under oath may be admitted to impeach a witness if the statement is inconsistent with the witness' testimony at hearing.
- g) **Oral and Written Statements.** Oral and written statements from participants may be taken at hearing in accordance with Section 101.628.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.628 Statements from Participants

- a) **Oral Statements.** The hearing officer may permit a participant to make oral statements on the record when time, facilities, and concerns for a clear and concise hearing record so allow. The oral statements must be made under oath and are subject to cross-examination. (See Sections 101.110 and 101.114)
- b) **Written Statements.** Any participant may submit written statements relevant to the subject matter at any time prior to hearing or at hearing. Participants submitting such a statement will be subject to cross-examination by any party. Written statements submitted without the availability of cross-examination will be treated as public comment in accordance with subsection (c) and will be afforded lesser weight than evidence subject to cross-examination.
- c) **Public Comments or Amicus Curiae Briefs.** Oral public comment may be made on the record at a hearing and is not subject to cross-examination. Additionally, participants may file written public comments subject to the requirements of this Section and the hearing officer's schedule for completion of the record. The Board also allows for the filing of amicus curiae briefs by non-party participants. Amicus curiae briefs will be allowed in accordance with Section 101.110.
 - 1) Written public comments must be filed within 14 days after the close of the last hearing unless the hearing officer specifies a different date for submission of post-hearing comments. However, all public comments must be filed with the Board no later than 30 days before the decision date, unless the hearing officer orders otherwise to prevent material prejudice. Consistent with the burden of proof in a proceeding, the hearing officer may provide for differing filing deadlines with respect to post-hearing comments by different persons. Under hearing officer order, rebuttal public comments may be submitted.

- 2) All public comments must present arguments or comments based on evidence contained in the record. The comments may also present legal argument citing legal authorities.
- 3) Comments must be filed with the Board. Comments will be distributed to parties and the hearing officer by the Clerk's office.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.630 Official Notice

Official notice may be taken of all facts of which judicial notice may be taken and of other facts within the specialized knowledge and experience of the Board.

Section 101.632 Site Visits

Upon the request of any party or the Board's own motion, the Board may conduct a site visit to establish a more comprehensive record. If the site visit is part of an adjudicatory proceeding, the Board will notify all parties in advance.

SUBPART G: ORAL ARGUMENT

Section 101.700 Oral Argument

- a) The Board may hear oral argument upon written motion of a party or the Board's own motion. The oral argument will be transcribed by a stenographer provided by the Board and become part of the record of the proceedings before the Board. The purpose of oral argument is to address legal questions. Oral argument is not intended to address new facts.
- b) Motions for oral argument must contain arguments supporting the grant of the motion for oral argument. In considering a motion for oral argument, the Board will consider, but is not limited to considering, the uniqueness of the issue or proceeding and whether the issue or proceeding involves a conflict of law.
- c) In any proceeding with a statutory decision deadline, the Board will deny the request for oral argument if there is insufficient time to schedule oral argument and allow time for the Board to issue its decision.
- d) If the Board grants the motion for oral argument, it will issue an order setting forth a schedule for oral argument that may include a briefing schedule. The brief will be limited to the issues for which oral argument was granted.

SUBPART H: SANCTIONS

Section 101.800 Sanctions for Failure to Comply with Procedural Rules, Board Orders, or Hearing Officer Orders

- a) If any person unreasonably fails to comply with any provision of 35 Ill. Adm. Code 101 through 130 or any order entered by the Board or the hearing officer, including any subpoena issued by the Board, the Board may order sanctions. The Board may order sanctions on its own motion, or in response to a motion by a party.
- b) Sanctions include the following:
 - 1) Further proceedings may be stayed until the order or rules are complied with, except in proceedings with a statutory decision deadline. Proceedings with a statutory decision deadline may be dismissed prior to the date on which decision is due;
 - 2) The offending person may be barred from filing any other pleading or other document relating to any issue to which the refusal or failure relates;
 - 3) The offending person may be barred from maintaining any particular claim, counterclaim, third party complaint, or defense relating to that issue;
 - 4) As to claims or defenses asserted in any pleading or other document to which that issue is material, a judgment by default may be entered against the offending person or the proceeding may be dismissed with or without prejudice;
 - 5) Any portion of the offending person's pleadings or other documents relating to that issue may be stricken and, if appropriate, judgment may be entered as to that issue; and
 - 6) The witness may be barred from testifying concerning that issue.
- c) In deciding what sanction to impose the Board will consider factors including: the relative severity of the refusal or failure to comply; the past history of the proceeding; the degree to which the proceeding has been delayed or prejudiced; and the existence or absence of bad faith on the part of the offending party or person.

Section 101.802 Abuse of Discovery Procedures

The Board or the hearing officer may order that information obtained through abuse of discovery procedures be suppressed. If a person willfully obtains or attempts to obtain information by an improper discovery method, willfully obtains or attempts to obtain information to which he is not

entitled, or otherwise abuses discovery rules, the Board or hearing officer may enter any order provided for in this Part.

SUBPART I: REVIEW OF FINAL BOARD OPINIONS AND ORDERS

Section 101.902 Motions for Reconsideration

In ruling upon a motion for reconsideration, the Board will consider factors including new evidence, or a change in the law, to conclude that the Board's decision was in error. (See also Section 101.520) A motion for reconsideration of a final Board order is ~~not~~ a prerequisite for the appeal of the final Board order.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.904 Relief from Final Opinions and Orders

- a) Upon its own motion or motion of any party, the Board may correct clerical mistakes in orders or other parts of the record and errors therein arising from oversight or omission before the appeal is docketed in the appellate court. While the appeal is pending, the mistakes may be corrected only with permission of the appellate court. Any corrected order will be mailed to all parties and participants in that proceeding.
- b) On written motion, the Board may relieve a party from a final order entered in a contested proceeding, for the following:
 - 1) Newly discovered evidence that existed at the time of hearing and that by due diligence could not have been timely discovered;
 - 2) Fraud (whether intrinsic or extrinsic), misrepresentation, or other misconduct of an adverse party; or
 - 3) Void order, such as an order based upon jurisdictional defects.
- c) A motion under this Section does not affect the finality of a Board order or suspend the operation of a Board order. The motion must be filed in the same proceeding in which the order was entered but is not a continuation of the proceeding. The motion must be supported by oath or affidavit or other appropriate showing as to matters not of record. All parties or participants in the proceeding must be notified by the movant as provided by Section 101.304.
- d) A motion under subsection (b) must be filed with the Board within one year after entry of the order except that a motion under subsection (b)(3) must be filed within a reasonable time after entry of the order.

- e) Any response to a motion under this Section must be filed within 14 days after the filing of the motion.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.906 Judicial Review of Board Orders

- a) Under Sections 29 and 41 of the Act and Supreme Court Rule 335, judicial review of final Board orders is available from the appellate court. However, under Section 11-60 of the Property Tax Code [35 ILCS 200/11-60], judicial review of final Board orders in tax certification proceedings is available from the circuit court.
- b) For purposes of judicial review, a final Board order is appealable as of the date of service of the final order upon the appealing person (see Section 101.300(d)).
- c) The procedure for stay of any final Board order during appeal will be as provided in Rule 335 of the Rules of the Supreme Court of Illinois (Ill. S. Ct. Rule 335).

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.908 Interlocutory Appeal

Upon motion of any party the Board may consider an interlocutory appeal in accordance with Supreme Court Rule 308. (Ill. S. Ct. Rule 308)

SUBPART J: ELECTRONIC FILING AND E-MAIL SERVICE

Section 101.1000 Electronic Filing and E-Mail Service

- a) The Board provides the opportunity to file and access documents electronically through its Clerk's Office On-Line (COOL). COOL is located on the Board's website (www.tncb.state.il.us). The Board has taken steps designed to ensure the integrity and security of COOL in accordance with State policies developed under the Electronic Commerce Security Act. [5 ILCS 175]
- b) To file an electronic document with the Board, a person must upload the document on COOL. Electronic filing is not accomplished by sending a document to the e-mail address of the Clerk or hearing officer.
- c) Except as provided in Section 101.302(h)(3), (h)(4), and (j) and Section 101.1050, all documents must be filed through COOL. However, if filing through COOL is not reasonably practicable, the Board, the hearing officer, or the Clerk may grant permission to file in paper.

- d) Generally, the Clerk's Office will not accept paper documents for filing; however, the Clerk's Office will convert paper-filed documents into electronic documents and place them on COOL, when permission to file a paper document is granted under subsection (c).
- e) All documents filed with the Board may be served by e-mail except for enforcement complaints, administrative citations, and EMSA statements of deficiency. (See Section 101.304(c) and Section 101.1060.)

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1010 Electronic Filing Authorization and Signatures

- a) A person seeking to upload a document on COOL for filing must have been issued a State of Illinois digital signature certificate under Section 15-310 of the Electronic Commerce Security Act. (See 5 ILCS 175/15-310.) A link to the subscriber agreement and application for a State of Illinois digital signature certificate is available through COOL.
 - 1) Maintaining digital signature confidentiality is the responsibility of the holder of the digital signature certificate. The certificate holder is responsible for any document electronically filed by anyone using his or her digital signature certificate.
 - 2) The digital signature certificate holder is responsible for keeping his or her contact information current.
- b) Each electronic document uploaded on COOL for filing must bear a facsimile electronic signature (i.e., scanned image of original pen-and-ink signature) or typographical electronic signature (i.e., "/s/ typed name") of the person authorizing the filing (e.g., attorney, participant, pro se party). However, if this electronic signature is absent, the document will be deemed to have been signed by the holder of the digital signature certificate used to upload the document and the certificate holder will be deemed to have authorized the filing. (See 5 ILCS 175/5-120.) To file an electronic document on behalf of another person in an adjudicatory proceeding, an electronic signature of a licensed and registered attorney is required. (See Section 101.400(a).)
- c) If an electronic document or portion thereof requires the signatures of any persons in addition to those specified in subsection (b) (e.g., settlement agreement, witness' affidavit), the person authorizing the filing must:
 - 1) Confirm that the additional persons have approved the document or corresponding portion thereof and obtain their original pen-and-ink signatures before the document is uploaded on COOL for filing;

- 2) Ensure that the document or corresponding portion thereof bears the facsimile electronic signatures of, and indicates the identity of, the additional persons;
- 3) Upload the document on COOL as a scanned image containing the necessary signatures; and
- 4) Retain the paper original of the document, including the original pen-and-ink signatures of the additional persons, for one year after the later of the following:
 - A) The date on which the time period expires for appealing the final order of the Board; or
 - B) If the final order of the Board is appealed, the date on which the time period expires for seeking any further review in the courts.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1020 Filing Electronic Documents

- a) **COOL.** To file an electronic document through COOL, the document must first be uploaded on COOL.
- b) **Digital Signature Certificate.** Uploading a document on COOL requires a valid State of Illinois digital signature certificate.
- c) **Uploading Hours.** Electronic documents may be uploaded on COOL 24 hours per day, every day.
- d) **E-Mail Receipt.** Uploading a document on COOL will generate an e-mail receipt for the digital signature certificate holder. The receipt will verify the date and time when the document was uploaded on COOL.
- e) **Time of Filing.** Subject to subsection (f), an electronic document uploaded on COOL will be considered filed as of the date and time specified on the e-mail receipt generated under subsection (d) except that:
 - 1) A document uploaded on a Saturday or Sunday, on a national or State legal holiday, or after 4:30 p.m. on a weekday is deemed filed the next business day.
 - 2) A document uploaded without one or more portions of the filing (e.g., oversized exhibit; trade secret or non-disclosable information; copyrighted document proposed for incorporation by reference in a rule) or without a

required oath, affidavit, notarization, signature, or filing fee is considered filed:

- A) On the date that the Clerk receives the document's last missing item; or
 - B) On the postmark date of the document's last missing item if that item was sent by U.S. Mail, was received after the date of a filing deadline, and has a postmark date that precedes or is the same as the deadline date.
- 3) A document consisting of multiple electronic files is considered filed as of the date and time specified on the e-mail receipt generated under subsection (d) for the last file uploaded to complete the document.
- f) Review by the Clerk. The Clerk will review electronically each document uploaded on COOL, validate the proceeding information provided, and accept or reject the document for filing.
- 1) If the Clerk accepts an uploaded document, the Clerk's Office will e-mail a notice of acceptance to the digital signature certificate holder, indicating that the filed document may be viewed on COOL.
 - 2) If the Clerk rejects an uploaded document, the Clerk's Office will e-mail a notice of rejection to the digital signature certificate holder. The Clerk may reject an uploaded document because the document is prohibited from being filed electronically under Section 101.302(h)(3) or (h)(4), the document fails to comply with file size or naming requirements of Section 101.1030(c), or the document is corrupted or otherwise cannot be readily opened. If an uploaded document is rejected by the Clerk, the Board may, upon good cause shown, enter an order deeming the document filed as of the date and time specified when the document was uploaded on COOL, subject to subsections (e)(1) through (e)(3).
- g) Technical Failure. If an electronic document is not uploaded, or is materially delayed in uploading, on COOL due to a technical failure, the Board may, upon good cause shown, enter an order deeming the document uploaded under subsection (d) as of the date and time of the first attempted uploading. "Technical failure" as used in this subsection is limited to a system outage of COOL or other malfunction of the hardware, software, or telecommunications facilities of the Board or the Board's electronic filing provider. "Technical failure", therefore, does not include any malfunction of the equipment used by the person authorizing the filing or the digital signature certificate holder.
- h) Clerk's Electronic Stamp. An electronic document uploaded on COOL and accepted by the Clerk for filing will be endorsed by the Clerk with a file stamp

setting forth the date of filing. This file stamp will be merged with the electronic document and visible when the document is viewed on COOL. Electronically filed documents so endorsed have the same legal effect as paper documents file-stamped by the Clerk conventionally in accordance with Section 101.300(b).

- i) **Decision Deadlines.** For purposes of Board decision deadlines, the decision period does not begin until the date on which the electronic document constituting the initial filing is considered filed under this Section.
- j) **Filing Deadlines.** The electronic filing of a document does not alter any applicable filing deadlines.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1030 Form of Electronic Documents for Filing

- a) In addition to complying with the formatting requirements of Section 101.302(g) and (j), electronic documents uploaded on COOL for filing must be in one of the following electronic formats:
 - 1) Adobe Portable Document Format (PDF), version 2.0 or greater;
 - 2) Microsoft Word for Windows, version 6.0 or greater;
 - 3) Corel WordPerfect for Windows, version 6.0 or greater; or
 - 4) Microsoft Excel for Windows, version 4.0 or greater.
- b) Generally, electronic documents filed in accordance with this Subpart will be posted to COOL by the Clerk's Office in text-searchable Adobe PDF. When practicable, persons should:
 - 1) Upload their electronic documents on COOL in text-searchable Adobe PDF; and
 - 2) Convert their electronic documents to a text-searchable Adobe PDF directly from the program used to create the document, rather than from a scanned image of the paper document. -
- c) No single electronic file uploaded on COOL, whether constituting all or part of an electronic document, may contain more than 10 megabytes (MB) of data. To comply with this requirement, an electronic document may be divided into parts and submitted as multiple electronic files, each file being 10 MB or less. The person authorizing the filing is responsible for dividing the document into appropriately-sized files and naming each file to reflect its place within the electronic document.

- d) Multiple electronic documents, whether for the same proceeding or different proceedings, must be uploaded separately on COOL and, therefore, must not be combined into a single electronic file for filing through COOL.
- e) Electronic documents may contain links to material external to the filed document. However, links to external material are for convenience purposes only. The external material behind the link is not considered part of the filing or the record of the proceeding in which the document was filed.
- f) All documents uploaded on COOL must be free of viruses or other harmful processes. If an electronic document containing a virus or other harmful process is uploaded on COOL, the Board may, consistent with Section 101.800(b) and (c), impose sanctions, including barring the document from being filed in any manner and barring the person authorizing the filing or the digital signature certificate holder from any further electronic filing through COOL.
- g) Documents filed under Section 101.382(h)(2) must:
 - 1) Include bookmarks, immediately viewable when the document is opened, to individual documents in the same order as they appear in the corresponding Table of Contents to facilitate navigation and location of specific contents within the document; and
 - 2) Have pagination on each document in the top right corner of each page.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1040 Filing Fees

- a) Filing fees are specified in Section 101.302(e). The Clerk's Office imposes no additional fee to file a document electronically.
- b) A person seeking to file an electronic document that requires a filing fee must either:
 - 1) Pay the fee with a valid credit card through COOL when the document is uploaded on COOL; or
 - 2) Deliver payment to the Clerk's Office in the form of government voucher, money order, or check made payable to the Illinois Pollution Control Board.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1050 Documents Required in Paper or Excluded from Electronic Filing

- a) A document containing information claimed or determined to be a trade secret, or other non-disclosable information under 35 Ill. Adm. Code 130, is prohibited from being filed electronically and must instead be filed only in paper under Section 101.302(h)(3). The version of the document that is redacted under 35 Ill. Adm. Code 130 must be filed through COOL.
- b) If a rulemaking proposal contains a document that is protected by copyright law (17 USC 101 *et seq.*) and proposed under Section 5-75 of the IAPA [5 ILCS 100/5-75] to be incorporated by reference, that copyrighted document is prohibited from being filed electronically and must instead be filed only in paper under Section 101.302(h)(4). The remainder of the rulemaking proposal must be filed through COOL.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1060 E-Mail Service

- a) Except as provided in subsections (b) and (d), a person required to serve a document may serve the document by e-mail in lieu of serving a paper document, if the recipient has consented to e-mail service in the proceeding and has not revoked the consent. (See Section 101.1070.) To serve a document by e-mail, it is not necessary to electronically file the document or to obtain a State of Illinois digital signature certificate.
- b) Service of enforcement complaints and EMSA statements of deficiency on a respondent must be made personally by U.S. Mail with a recipient's signature recorded, or by a third-party commercial carrier with a recipient's signature recorded. (See Section 101.304(c)(2).)
- c) Service of administrative citations must be made as required under 35 Ill. Adm. Code 108.
- d) A person required to serve a document on the hearing officer must serve the hearing officer by sending the document to the hearing officer's e-mail address in lieu of serving a paper document upon the hearing officer if the person has the capability of serving the document by e-mail.
- e) When a document is served by e-mail, documentation of service must be filed with the Clerk and served on all persons entitled to service in that proceeding. A sample form of affidavit or certificate of e-mail service is available in Appendix H. An affidavit or certificate of e-mail service must include the following:
 - 1) The e-mail address of the recipient and the person authorizing the filing;
 - 2) The number of pages in the e-mail transmission;

- 3) A statement that the document was served by e-mail; and
 - 4) The date of the e-mail transmission and the time by when it took place.
- f) If any computer malfunction precludes the e-mail service of a document, the person authorizing the filing must promptly serve the document in paper under 101.304(c).
- g) Except for final adjudicatory orders of the Board, which the Clerk's Office serves in paper by certified mail, the Clerk's Office will serve Board orders and hearing officer orders by e-mail, in lieu of serving paper documents, if the recipient has consented to e-mail service in the proceeding and has not revoked the consent. (See Section 101.1070.) The Clerk will record the date and time of e-mail service, consistent with subsection (e).

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

Section 101.1070 Consenting to Receipt of E-Mail Service

- a) In any proceeding, a person consents to e-mail service of documents in lieu of receiving paper documents by:
- 1) Filing a "Consent to Receipt of E-Mail Service" (see sample form of consent in Appendix I);
 - 2) Providing the hearing officer, during a hearing or conference, with an e-mail address that is designated for receiving service;
 - 3) Filing an attorney's appearance; or
 - 4) Appearing on a notice list or service list and providing the Clerk's Office with an e-mail address that is designated for receiving service.
- b) At any time during a proceeding, consent to e-mail service may be provided as set forth in subsection (a). To accept e-mail service, it is not necessary to obtain a State of Illinois digital signature certificate.
- c) A person's consent to receiving e-mail service may be revoked by that person at any time during the proceeding upon the person's filing of a notice of the revocation with the Clerk's Office. However, an attorney who filed an appearance must not revoke consent unless the appearance is withdrawn.
- d) Upon a change in the e-mail address of a recipient of e-mail service, the recipient must notify the Clerk's Office of the e-mail address change for each pending proceeding in which the person has consented to e-mail service.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

APPENDIX A

Captions

ILLUSTRATION A Enforcement Case

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

PEOPLE OF THE STATE OF
ILLINOIS,

Complainant,

v.

W. R. JONES Co.,

Respondent.

PCB xx-xxx
(Enforcement-X)

ILLUSTRATION B Citizen's Enforcement Case

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

JOHN DOE,

Complainant,

v.

W. R. JONES Co.,

Respondent.

PCB xx-xxx
(Enforcement-X)

ILLUSTRATION C Variance

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

W.R. WATER CO.,

Petitioner,

v.

PCB xx-xxx

	)	(Variance-X)
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

ILLUSTRATION D Adjusted Standard Petition

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	
PETITION OF ABC COMPANY	)	AS xx-xxx
FOR AN ADJUSTED STANDARD	)	(Adjusted Standard-X)
FROM 35 Ill. Adm. Code XXX.XXX)	

ILLUSTRATION E Joint Petition for an Adjusted Standard

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	
PETITION OF ABC COMPANY AND	)	AS xx-xxx
THE ILLINOIS ENVIRONMENTAL	)	(Adjusted Standard-X)
PROTECTION AGENCY FOR)	
ADJUSTED STANDARD FROM)	
35 Ill. Adm. Code XXX.XXX)	

ILLUSTRATION F Permit Appeal

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

GENERAL COMPANY,)	
)	
Petitioner,)	
)	
v.	)	PCB xx-xxx
	)	(Permit Appeal-X)
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

ILLUSTRATION G Underground Storage Tank Appeal

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

GENERAL COMPANY,

Petitioner,

v.

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY,

Respondent.

PCB xx-xxx
(UST Fund Appeal)

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

GENERAL COMPANY,

Petitioner,

v.

OFFICE OF THE STATE
FIRE MARSHAL,

Respondent.

PCB xx-xxx
(UST Appeal)

ILLUSTRATION H Pollution Control Facility Siting Appeal

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

GENERAL COMPANY,

Petitioner,

v.

XXX COUNTY AND ABC DISPOSAL
COMPANY,

PCB xx-xxx
(Pollution Control Facility Siting Appeal)

Respondents.)

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

ABC DISPOSAL COMPANY,)
)
 Petitioner,)
)
 v.) PCB xx-xxx
) (Pollution Control Facility Siting Appeal)
)
 XXX COUNTY,)
)
 Respondent.)

ILLUSTRATION I Administrative Citation

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

COUNTY OF COOK,)
)
 Complainant,)
)
 v.) AC xx-xxx
) IEPA or County Number
) (Administrative Citation)
)
 ABC DISPOSAL AND)
 RECYCLING, INC.,)
)
 Respondent.)

Section 101. ILLUSTRATION J Administrative Citation Under Section 23.1 of the Public Water Supply Operations Act

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

ILLINOIS ENVIRONMENTAL)
 PROTECTION AGENCY,)
)
 Complainant,)
)
 v.) AC xx-xxx
) IEPA Number

JOHN SMITH,) (Administrative Citation)
)
 Respondent.)

(Source: Former Illustration J renumbered to Illustration K and new Illustration J added at 39 Ill. Reg. 12848, effective September 8, 2015)

Section 101.ILLUSTRATION L Site-specific Rulemaking

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
 PROPOSED SITE SPECIFIC WATER) Rxx-xxx
 POLLUTION REGULATIONS) (Site-Specific Rulemaking X)
 APPLICABLE TO XYZ)
 UTILITIES COMPANY OF ILLINOIS)
 DISCHARGE TO XYZ CREEK:)
 35 Ill. Adm. Code)

BOARD NOTE: The Board notes that all docket numbers consist of letter(s) followed by two numbers. The first two digit number is the local year the matter was filed. Then the second number is the sequential number for that type of filing the Board has received that year. Persons making filings are not responsible for the Board docket number on the original filing. The Clerk of the Board will assign the appropriate docket number when the matter is filed. All filings in a matter that has been assigned a docket number must contain a docket number located as indicated on the examples above. The Board will also be designating its opinion and orders with the type of case and media involved in the matter. Where the above examples have the type of case followed by "X", the Board will, for example if the case is dealing with a variance from certain water regulations, put the media, water, after variance to become "Variance-Water". Again, persons making filings need not place this on original filings. However, all filings in a matter that has been assigned the media must indicate that media in the location as in the above examples. Where there are specific procedural rules developed for specific types of cases, as in a "UST Appeal" persons making filings must follow those examples.

(Source: Amended at 41 Ill. Reg. 9930, effective July 5, 2017)

APPENDIX B Appearance Form

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Applicable Caption)
 (see Appendix A)) docket number

)

APPEARANCE

I hereby file my appearance in this proceeding, on behalf of
ABC Company.

Attorney's Name

Name of Attorney and Firm
Address
Telephone Number

APPENDIX C
Withdrawal of Appearance Form

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Applicable Caption
(see Appendix A)

}
} docket number
}

NOTICE OF WITHDRAWAL OF APPEARANCE

I hereby give notice of withdrawal of my appearance as
representative of ABC Company in this proceeding.

Attorney's Name

Name of Attorney and Firm
Address
Telephone Number

APPENDIX D
Notice of Filing

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Applicable Caption
(see Appendix A)

)
)
)
)
)

docket number

NOTICE OF FILING

To: (List all persons served.)

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Pollution Control Board the [specify what document was filed] of [name of persons filing the document], a copy of which is herewith served upon you.

Name of Attorney or Other Representative

Date

Name

Address

Telephone Number

Section 101.APPENDIX E Affidavit or Certificate of Service

Section 101.ILLUSTRATION A Service by Non-Attorney

AFFIDAVIT OF SERVICE

I, the undersigned, on oath [or affirmation] state that I have served on the date of _____, the attached [describe document served] upon the following persons by [describe method of service, e.g., depositing the document in a U.S. Postal Service mailbox or delivering the document to a third-party commercial carrier], by the time of _____, with proper postage or delivery charges prepaid:

[list persons served and the respective addresses at which they were served]

[signature]

Notary Seal

SUBSCRIBED AND SWORN TO BEFORE ME this _____ day of _____, 20 ____.

Notary Public

(Source: Amended at 39 Ill. Reg. 12848, effective September 8, 2015)

Section 101.ILLUSTRATION B Service by Attorney

CERTIFICATE OF SERVICE

I, the undersigned, certify that I have served on the date of _____ the attached [describe document served] upon the following persons by [describe method of service, e.g., depositing the document in a U.S. Postal Service mailbox or delivering the document to a third-party commercial carrier], by the time of _____, with proper postage or delivery charges prepaid:

[list persons served and the respective addresses at which they were served]

[signature]

[date]

(Source: Amended at 39 Ill. Reg. 12848, effective September 8, 2015)

101.APPENDIX F Notice of Withdrawal (Repealed)

(Source: Repealed 29 Ill. Reg. 8743, effective June 8, 2005)

101.APPENDIX G Comparison of Former and Current Rules (Repealed)

(Source: Repealed 29 Ill. Reg. 8743, effective June 8, 2005)

Section 101.APPENDIX H Affidavit or Certificate of E-Mail Service

Section 101.ILLUSTRATION A E-Mail Service by Non-Attorney

AFFIDAVIT OF E-MAIL SERVICE

I, the undersigned, on oath [or affirmation] state the following:

That I have served the attached [describe document served] by e-mail upon [identify person served] at the e-mail address of [identify e-mail address of person served].

That my e-mail address is _____.

That the number of pages in the e-mail transmission is ____.

That the e-mail transmission took place before 5:00 p.m. on the date of _____.

[signature]

Notary Seal

SUBSCRIBED AND SWORN TO BEFORE ME this _____ day of _____, 20____.

Notary Public

(Source: Added at 39 Ill. Reg. 2276, effective January 27, 2015)

Section 101.ILLUSTRATION B E-Mail Service by Attorney

CERTIFICATE OF E-MAIL SERVICE

I, the undersigned, on oath [or affirmation] state the following:

That I have served the attached [describe document served] by e-mail upon [identify person served] at the e-mail address of [identify e-mail address of person served].

That my e-mail address is _____.

That the number of pages in the e-mail transmission is ____.

That the e-mail transmission took place before 5:00 p.m. on the date of _____.

[signature]

[date]

(Source: Added at 39 Ill. Reg. 2276, effective January 27, 2015)

Section 101.APPENDIX I Consent to Receipt of E-Mail Service

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Applicable Caption
(see Appendix A)

)
)
)
)

docket number

I, the undersigned, authorize the service of documents on me by e-mail in lieu of receiving paper documents in the above-captioned proceeding. My e-mail address to receive service is as follows: _____.

[signature]
[date]

(Source: Added at 39 Ill. Reg. 2276, effective January 27, 2015)

DRAFT

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE A: GENERAL PROVISIONS
CHAPTER I: POLLUTION CONTROL BOARD

PART 105
APPEALS OF FINAL DECISIONS OF STATE AGENCIES

SUBPART A: GENERAL PROVISIONS

Section	
105.100	Applicability
105.102	Severability
105.104	Definitions
105.106	Computation of Time, Filing and Service Requirements
105.108	Dismissal of Petition
105.110	Hearing Process
105.112	Burden of Proof
105.114	Calculation of Decision Deadline
105.116	<u>Agency or OSFM Record Filing</u>
105.118	Sanctions for Non-Compliant Filing of the <u>Agency Record</u> or the <u>OSFM Record</u>

SUBPART B: APPEAL OF AGENCY PERMIT DECISIONS AND OTHER FINAL
DECISIONS OF THE AGENCY

Section	
105.200	Applicability
105.202	Parties
105.204	Who May File a Petition for Review
105.206	Time to File the Petition or Request for Extension
105.208	Extension of Time to File a Petition for Review
105.210	Petition Content Requirements
105.212	<u>The Agency Record</u>
105.214	Board Hearing

SUBPART C: CAAPP PERMIT APPEALS

Section	
105.300	Applicability
105.302	General Requirements
105.304	Petition Content Requirements

SUBPART D: APPEAL OF AGENCY LEAKING UNDERGROUND
STORAGE TANK (LUST) DECISIONS

Section	
105.400	Parties
105.402	Who May File a Petition for Review
105.404	Time for Filing the Petition

105.406	Extension of Time to File a Petition for Review
105.408	Petition Content Requirements
105.410	<u>The Agency Record</u>
105.412	Board Hearing

SUBPART E: APPEAL OF OSFM LUST DECISIONS

Section	
105.500	Applicability
105.502	General Overview
105.504	General Requirements
105.506	Petition Content Requirements
105.508	OSFM Record and Appearance
105.510	Location of Hearing

SUBPART F: PSD PERMIT APPEALS

<u>105.600</u>	<u>Applicability</u>
<u>105.602</u>	<u>Parties</u>
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105.APPENDIX A Agency LUST Final Decisions that are Reviewable (Repealed)

105.APPENDIX B Comparison of Former and Current Rules (Repealed)

AUTHORITY: Authorized by Sections 26 and 27 of the Environmental Protection Act (Act) [415 ILCS 5/26 and 27] and implementing Sections 5, 39, 39.5, 40, 40.1, 40.2, and 57 of the Act [415 ILCS 5/5, 39, 39.5, 40, 40.1, 40.2 and 57].

SOURCE: Filed with Secretary of State January 1, 1978; amended 4 Ill. Reg. 52, page 41, effective December 11, 1980; codified 6 Ill. Reg. 8357; amended in R93-24 at 18 Ill. Reg. 4244, effective March 8, 1994; amended in R94-11 at 18 Ill. Reg. 16594, effective November 1, 1994; old Part repealed, new Part adopted in R00-20 at 25 Ill. Reg. 406, effective January 1, 2001; amended in R04-24 at 29 Ill. Reg. 8811, effective June 8, 2005; amended in R14-21 at 39 Ill. Reg. 2369, effective January 27, 2015; amended in R16-17 at 40 Ill. Reg. 7980, effective May 20, 2016; amended in R17-18 at 41 Ill. Reg. 9930, effective July 5, 2017.

SUBPART A: GENERAL PROVISIONS

Section 105.100 Applicability

- a) This Part applies to appeals of final decisions of the Agency and the OSFM to the Board as described in this Part.
- b) This Part must be read in conjunction with 35 Ill. Adm. Code 101, which contains procedures generally applicable to all of the Board's adjudicatory proceedings. In the event of a conflict between the requirements of 35 Ill. Adm. Code 101 and those of this Part, the provisions of this Part apply.

Section 105.102 Severability

If any provision of this Part or its application to any person is adjudged invalid, the adjudication does not affect the validity of this Part as a whole or of any portion not adjudged invalid.

Section 105.104 Definitions

- a) Nonattainment New Source Review (NANSR) means Illinois' rules for Major Stationary Sources Construction and Modification (MSSCAM) at 35 Ill. Adm. Code Part 203.
- a) _____
- b) For the purpose of this Part, other words and terms will have the meanings as defined in 35 Ill. Adm. Code 101 Subpart B unless otherwise provided, or unless the context clearly indicates otherwise.

Section 105.106 Computation of Time, Filing and Service Requirements

Unless this Part provides otherwise, service, filing, and computation of time must be in accordance with 35 Ill. Adm. Code 101 Subpart C.

Section 105.108 Dismissal of Petition

A petition is subject to dismissal if the Board determines that:

- a) The petition does not contain the informational requirements set forth in Section ~~105.210, 105.304, 105.408, or 105.506~~ or 105.608;
- b) The petition is untimely under Section 105.206, 105.302, 105.404, ~~or 105.504~~ or 105.606;
- c) The petitioner fails to timely comply with any order issued by the Board or the hearing officer, including an order requiring additional information;
- d) The petitioner does not have standing under applicable law to petition the Board for review of the State agency's final decision; or
- e) Other grounds exist that bar the petitioner from proceeding.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.110 Hearing Process

Hearings will be conducted under 35 Ill. Adm. Code 101.Subpart F, including any hearing held by videoconference (see 35 Ill. Adm. Code 101.600(b)).

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.112 Burden of Proof

Unless this Part provides otherwise:

- a) *The burden of proof shall be on the petitioner except as provided in subsection (b) of this Section [415 ILCS 5/40(a)(1), 40(b) and (e)(3), and 40.2(a) and 40.3(a)(2)].*
- b) *The burden of proof is on the Agency if the Agency issues an NPDES permit that imposes limits which are based upon a criterion or denies a permit based upon application of a criterion, then the Agency shall have the burden of going forward with the basis for the derivation of those limits or criterion which were derived under the Board's rules. [415 ILCS 5/40(a)(1)]*

Section 105.114 Calculation of Decision Deadline

The Board will render its final decision on the petition within any applicable decision period (which commences when the petition is filed in accordance with 35 Ill. Adm. Code 101.300(b)(4)), except:

- a) *When the petitioner waives its right to a decision within the prescribed decision period in accordance with 35 Ill. Adm. Code 101.Subpart C; or*
- b) *When the petitioner files an amended petition, the decision period recommences when the amended petition is filed in accordance with 35 Ill. Adm. Code 101.300(b)(4).*

Section 105.116 Agency or OSFM Record Filing

- a) *The State agency must file with the Board the entire record of ~~its~~ the Agency's or OSFM's decision, as applicable, within 30 days after the filing of the petition for review, unless this Part provides otherwise, or the Board or hearing officer orders a different filing date. If the ~~State agency~~ Agency or OSFM wishes to seek additional time to file ~~its~~the record, it must file a request for extension before the date on which ~~its~~the record is due to be filed. Under 35 Ill. Adm. Code 101.302(h)(2), ~~each~~the State agency must file ~~its~~the record through COOL or on compact disk or other portable electronic data storage device and, to the extent*

technically feasible, in text-searchable Adobe PDF. The record also must meet the requirements of 35 Ill. Adm. Code 101. Subpart J.

- b) The Agency record or OSFM record, as applicable, must be arranged in chronological sequence, or by category of material and chronologically within each category, and must be sequentially numbered with the letter "R" placed before the number of each page. This page number must appear in the top right corner of each page. The Agency record or OSFM record must be certified by the applicable State agency. The certification must be entitled "Certificate of Record on Appeal". The Certificate must contain an index that lists the documents comprising the Agency record or OSFM record and shows the page numbers upon which each document starts and ends. The Certificate of Record must be served on all parties by the State agency.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.118 Sanctions for Untimely Filing of the Record

If the ~~State agency~~ Agency or OSFM unreasonably fails to timely file ~~its~~ the record on or before the date required under this Part, or unreasonably fails to prepare the record in accordance with this Part and 35 Ill. Adm. Code 101 Subpart J, the Board may sanction the relevant State agency in accordance with 35 Ill. Adm. Code 101. Subpart H.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

SUBPART B: APPEAL OF AGENCY PERMIT DECISIONS AND OTHER FINAL DECISIONS OF THE AGENCY

Section 105.200 Applicability

This Subpart applies to any appeal to the Board of the Agency's final permit decisions and other final decisions of the Agency, except:

- a) When the appeal is of a final CAAPP decision of the Agency, which is addressed in Subpart C of this Part; and
- b) When the appeal is of a final leaking underground storage tank decision of the Agency, which is addressed in Subpart D of this Part; and
- c) When the appeal is of a final PSD permit decision of the Agency, which is addressed in Subpart F of this Part.

Section 105.202 Parties

- a) **Petitioner.** The person who files a petition for review of the Agency's final decision must be named the petitioner.

- b) Respondent. The Agency must be named the respondent. If a petition is filed under Section 105.204(b), (c) or (d) by a person other than the permit applicant, the permit applicant must be named as a respondent in addition to the Agency.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.204 Who May File a Petition for Review

- a) General. *If the Agency refuses to grant or grants with conditions a permit under Section 39 of the Act, the applicant may petition for a hearing before the Board to contest the decision of the Agency.* [415 ILCS 5/40(a)(1)]
- b) National Pollutant Discharge Elimination System (NPDES) Permit. *If the Agency grants or denies a permit under subsection (b) of Section 39 of the Act, a third party, other than the permit applicant or Agency, may petition the Board for a hearing to contest the decision of the Agency.* [415 ILCS 5/40(e)(1)]-
- c) Resource Conservation and Recovery Act (RCRA) Permit for a Hazardous Waste Disposal Site. *If the Agency grants a RCRA permit for a hazardous waste disposal site, a third party, other than the permit applicant or Agency, may petition the Board for a hearing to contest the issuance of the permit. This subsection does not apply to the granting of permits issued for the disposal or utilization of sludge from publicly-owned sewage works.* [415 ILCS 5/40(b)]
- d) Hazardous Waste Permit. *Any party to an Agency proceeding conducted pursuant to Section 39.3 of the Act may petition as of right to the Board for review of the Agency's decision.* [415 ILCS 5/40(c)]
- e) EMSAs. *If the Agency terminates an EMSA under Section 52.3-4(b) of the Act, the sponsor may petition the Board for review of the Agency's final decision.*
- f) Other Agency Final Decisions. *If the Agency's final decision is to deny or to conditionally grant or approve, the person who applied for or otherwise requested the Agency decision, or the person to whom the Agency directs its final decision, may petition the Board for review of the Agency's final decision. In addition, any third party authorized by law to appeal a final decision of the Agency to the Board may file a petition for review with the Clerk.*

Section 105.206 Time to File the Petition or Request for Extension

- a) Except as provided in subsection (b), if a person who may petition the Board under Section 105.204 wishes to appeal the Agency's final decision, the person must file the petition with the Clerk within 35 days after the date of service of the Agency's final decision.

- b) If a person with standing as described in Section 105.204(d), or any third party who is authorized by law to appeal a final decision of the Agency to the Board, wishes to appeal the Agency's final decision, the person must file a petition for review with the Clerk within 35 days after the date of issuance of the Agency's final decision.
- c) Except as provided in subsection (d), if a person who may petition the Board under Section 105.204 of this Subpart wishes to request an extension of time to file a petition for review under Section 105.208(a), the person must file the request within 35 days after the date of service of the Agency's final decision.
- d) If a person with standing as described in Section 105.204(d), or any third party who is authorized by law to appeal a final decision of the Agency to the Board, wishes to request an extension of time to file a petition for review under Section 105.208(b), the person must file the request within 35 days after the date of issuance of the Agency's final decision.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.208 Extension of Time to File a Petition for Review

- a) **Permit or Other Agency Final Decision.** For appeals under Section 40(a)(1) of the Act, *the 35-day period described in Section 105.206(a) of this Subpart for petitioning for a hearing may be extended by the applicant for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Agency within the initial appeal period.* [415 ILCS 5/40(a)(1)]
 - 1) The applicant and the Agency must jointly file a request for extension within 35 days after the date of service of the Agency's final decision.
 - 2) The joint request may seek an appeal period not exceeding 125 days from the date of service of the Agency's final decision to file a petition for review under this Subpart.
- b) **Hazardous Waste Permit.** For appeals under Section 40(c) of the Act, *the 35-day period described in Section 105.206(b) for petitioning for a hearing may be extended by the applicant for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Agency within the initial appeal period. If another person with standing to appeal a hazardous waste disposal permit wishes to obtain an extension, there must be a written notice provided to the Board by that person, the Agency, and the applicant, within the initial appeal period.* [415 ILCS 5/40(c)]
 - 1) If the applicant is the petitioner, the applicant and the Agency must jointly file a request for extension within 35 days after the date of issuance of the Agency's final decision.

- 2) If a person with standing other than the applicant is the petitioner, the Agency, the applicant and that person must jointly file a request for extension within 35 days after the date of issuance of the Agency's final decision.
- 3) The joint request may seek an appeal period not exceeding 125 days from the date of issuance of the Agency's final decision to file a petition for review under this Subpart.
- c) Any request for extension of time under this Section must be accompanied by written evidence that the Agency joins in the request, e.g., affidavit of the petitioner or signature of the Agency's representative.
- d) Extensions of time to file petitions under Section 105.204(b), (c), or (e) are not available.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.210 Petition Content Requirements

In addition to the requirements of 35 Ill. Adm. Code 101. Subpart C, the petition must include:

- a) The Agency's final decision or issued permit;
- b) A statement specifying the date of issuance or service of the Agency's final decision or issued permit, as applicable under Section 105.206;
- c) A statement specifying the grounds of appeal; and
- d) For petitions under Section 105.204(b), *a demonstration that the petitioner raised the issues contained within the petition during the public notice period or during the Agency public hearing on the NPDES permit application, if an Agency public hearing was held, and a demonstration that the petitioner is so situated as to be affected by the permitted facility.* [415 ILCS 5/40(e)(2)]

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.212 Agency Record

- a) The Agency must file its entire Agency record of its decision with the Clerk in accordance with Section 105.116.
- b) The Agency record must include:

- 1) Any permit application or other request that resulted in the Agency's final decision;
- 2) Correspondence with the petitioner and any documents or materials submitted by the petitioner to the Agency related to the permit application;
- 3) The permit denial letter that conforms to the requirements of Section 39(a) of the Act or the issued permit or other Agency final decision;
- 4) The Agency public hearing record file of any Agency public hearing that may have been held before the Agency, including any transcripts and exhibits; and
- 5) Any other information the Agency relied upon in making its final decision.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.214 Board Hearing

- a) Except as provided in subsections (b), (c) and (d), the Board will conduct a public hearing, in accordance with 35 Ill. Adm. Code 101. Subpart F, upon an appropriately filed petition for review. The hearing will be based exclusively on the Agency record before the Agency at the time the permit or decision was issued, unless the parties agree to supplement the Agency record under Section 40(d) of the Act. If any party desires to introduce evidence before the Board with respect to any disputed issue of fact, the Board will conduct a separate hearing and receive evidence with respect to the issue of fact.
- b) The Board will not hold a hearing on a petition for review under this Subpart if the Board disposes of the petition on a motion for summary judgment brought under 35 Ill. Adm. Code 101.516.
- c) The Board will not hold a hearing on a petition for review under Section 105.204(c) if the Board determines that:
 - 1) The petition is duplicative or frivolous; or
 - 2) The petitioner is so located as to not be affected by the permitted facility.
- d) The Board will not hold a hearing on a petition for review under Section 105.204(b) or (d) if the Board determines that the petition is duplicative or frivolous.
- e) If the Board determines to hold a hearing, the Clerk will give notice of the hearing under 35 Ill. Adm. Code 101.602.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

SUBPART C: CAAPP PERMIT APPEALS

Section 105.300 Applicability

This Subpart applies to proceedings before the Board concerning appeals from CAAPP final determinations made under Section 39.5 of the Act.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.302 General Requirements

- a) The definitions of 35 Ill. Adm. Code 101.202 and Section 39.5 of the Act will apply to this Subpart unless otherwise provided, or unless the context clearly indicates otherwise.
- b) If the Agency denies a CAAPP permit, permit modification, or permit renewal it must provide to USEPA, the permit applicant and, upon request, affected states, any person who participated in the public comment process and any other person who could obtain judicial review under Section 41(a) of the Act [415 ILCS 5/41(a)] a copy of each notification of denial pertaining to the permit applicant.
- c) The applicant, any person who participated in the public comment process under Section 39.5(8) of the Act, or any other person who could obtain judicial review under Section 41(a) of the Act may contest the decisions of the Agency enumerated in this subsection (c) by filing with the Clerk a petition for review of the Agency's action in accordance with this Section:
 - 1) Denial of a CAAPP permit, including a permit revision or permit renewal, or a determination of incompleteness regarding a submitted CAAPP application;
 - 2) Issuance of a CAAPP permit with one or more conditions or limitations;
 - 3) Failure of the Agency to act on an application for a CAAPP permit, permit renewal, administrative permit amendment or significant permit modification within the time frames specified in Section 39.5(5)(j) or Section 39.5(13) of the Act, as applicable; or
 - 4) Failure of the Agency to take final action within 90 days after receipt of an application requesting minor permit modification procedures (or 180 days for modifications subject to group processing requirements) under Section 39.5(14) of the Act.

- d) For purposes of this Subpart, a person who participated in the Agency public comment process is someone who, during the Agency public comment period, either commented on the draft permit, submitted written comments, or requested notice of the final action on a specific permit application.
- e) The petition filed under subsection (c) must be filed within 35 days after the Agency's final permit action unless:
 - 1) The petition is based solely on grounds arising after the 35 day period expires, in which case the petition may be filed within 35 days after the new grounds for review arise.
 - 2) The applicant is challenging the Agency's failure to timely take final action under Section 39.5 of the Act, in which case the petition must be filed before the Agency takes the final action.
 - 3) However, under no circumstances may a petition challenging the final permit action on a Phase II acid rain permit be filed more than 90 days subsequent to the final permit action.
- f) The Agency must appear as respondent at the hearing and must file within 30 days after service of the petition, an answer consisting of the entire Agency record of the application including the CAAPP permit application, the Agency public hearing record, the CAAPP permit denial or issuance letter, and correspondence with the applicant concerning the CAAPP permit application.
- g) The Clerk will give notice of the petition and hearing in accordance with 35 Ill. Adm. Code 101.
- h) The proceeding will be conducted in accordance with 35 Ill. Adm. Code 101.
- i) *The Agency shall notify USEPA, in writing, of any petition for hearing brought under this Part involving a provision or denial of a Phase II acid rain permit within 30 days of the filing of the petition. USEPA may intervene as a matter of right in any such hearing. The Agency shall notify USEPA, in writing, of any determination or order in a hearing brought under this Section that interprets, voids, or otherwise relates to any portion of a Phase II acid rain permit. [415 ILCS 5/40.2(e)]*

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.304 Petition Content Requirements

- a) The petition must include:

- 1) Aa concise description of the CAAPP source for which the permit is sought;
 - 2) Aa statement of the Agency's decision or part thereof to be reviewed;
 - 3) Aa justification as to why the Agency's decision or part thereof was in error; and
 - 4) The other materials upon which the petitioner relies in its petition.
- b) The petition may include a request to stay the effectiveness of a denial of the CAAPP permit until final action is taken by the Board under Section 40.2 of the Act.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

SUBPART D: APPEAL OF AGENCY LEAKING UNDERGROUND STORAGE TANK (LUST) DECISIONS

Section 105.400 Parties

- a) Petitioner. The person who files a petition for review of the Agency's final decision made under Title XVI of the Act [415 ILCS 5/57 through 57.19] (or under the former Section 22.18b(g) of the Act) must be named as petitioner.
- b) Respondent. The Agency must be named as the respondent.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.402 Who May File a Petition for Review

Any owner or operator may file a petition for review under Section 40 of the Act of an Agency final determination made under Title XVI of the Act [415 ILCS 5/57-57.19] (or under the former Section 22.18b(g) of the Act). There are several Agency determinations that may be appealed under Section 40 of the Act.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.404 Time for Filing the Petition

Petitions must be filed in accordance with this Section or the Board does not have the authority to review the Agency's decision and will dismiss the proceeding on its own motion or on the motion of any party. Within 35 days after the date of service of the Agency's final decision the petitioner may file with the Clerk:

- a) A petition for review that contains the requirements of Section 105.408; or

- b) A request for an extension of time to file a petition for hearing under Section 105.406.

Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.406 Extension of Time to File a Petition for Review

Under Section 40(a)(1) of the Act, *the 35-day period for petitioning for a hearing may be extended by the applicant for a period of time not to exceed 90 days by written notice provided to the Board from the applicant and the Agency within the initial appeal period.* [415 ILCS 5/40(c)] The applicant and the Agency must jointly file a request for extension with the Board within 35 days after the date of service of the Agency's final decision. Upon an appropriately filed request for an extension, the applicant has a period not exceeding 125 days after the date of service of the Agency's final decision to file a petition for review before the Board under Section 105.408.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.408 Petition Content Requirements

In addition to the requirements of 35 Ill. Adm. Code 101.Subpart C the petition must contain:

- a) The Agency's final decision;
- b) A statement specifying the date of service of the Agency's final decision; and
- c) A statement specifying the grounds of appeal.

Section 105.410 Agency Record

- a) The Agency must file the entire Agency record of its decision with the Board in accordance with Section 105.116.
- b) The Agency record must include:
 - 1) The plan or budget submittal or other request that requires an Agency decision;
 - 2) Correspondence with the petitioner and any documents or materials submitted by the petitioner to the Agency related to the plan or budget submittal or other request;
 - 3) The final determination letter; and
 - 4) Any other information the Agency relied upon in making its determination.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.412 Board Hearing

The Board will conduct a public hearing in accordance with 35 Ill. Adm. Code 101.Subpart F including any hearing held by videoconference (see 35 Ill. Adm. Code 101.600 (b)) upon an appropriately filed petition for review, unless a petition is disposed of by a motion for summary judgment brought under 35 Ill. Adm. Code 101.516. The hearing will be based exclusively on the Agency record before the Agency at the time the permit or decision was issued.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

SUBPART E: APPEAL OF OSFM LUST DECISIONS

Section 105.500 Applicability

This Subpart applies to proceedings before the Board concerning appeals from OSFM final determinations made under Section 57.9(c) of the Act.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.502 General Overview

OSFM final determinations are made either through the issuance of an "Eligibility and Deductibility Determination" letter or by the failure of OSFM to act upon receipt of an "Eligibility and Deductibility Determination" form within 60 days under Section 57.9(c)(2) of the Act. The process before the Board for review of final determinations by the OSFM includes the following steps. Upon receipt of a petition for review, unless the Board determines that the petition is insufficient, a hearing date and location will be assigned. Hearings will be publicly-noticed in the county where the underground storage tank site is located. If the parties enter into a settlement agreement prior to or during the hearing process, the parties may request that the Board accept and enter a final order adopting a proposed settlement agreement; the order may be requested with or without a hearing.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.504 General Requirements

- a) **Who May File.** Any owner or operator of an underground storage tank who has been issued an "Eligibility and Deductibility Determination" letter or who has not received an "Eligibility and Deductibility Determination" letter from the OSFM within the time prescribed by Section 57.9(c)(2) of the Act, which is deemed to be a final decision appealable to the Board, may file a petition with the Board seeking review of that final decision. The owner operator must be named as the petitioner, and the OSFM must be named as the respondent. Filing requirements are set forth at 35 Ill. Adm. Code 101.Subpart C.

- b) **Timely Petition.** The petition for review must be filed with the Board within 35 days after the date of the OSFM's "Eligibility and Deductibility Determination" letter or within 35 days from the OSFM's final decision due to its failure to act as required under Section 57.9(c)(3) of the Act. There will be a rebuttable presumption that petitioner received the OSFM's "Eligibility and Deductibility Final Determination" letter four days from the date indicated on the letter.
- c) **Service and Filing.** The petitioner must serve all filings upon the OSFM in accordance with 35 Ill. Adm. Code 101.304(c). All filings must be accompanied by a notice of filing. Methods and documentation of service, as well as the effective date of service, are governed by 35 Ill. Adm. Code 101.Subpart C.

(Source: Amended at 39 Ill. Reg. 2369, effective January 27, 2015)

Section 105.506 Petition Content Requirements

In addition to the requirements of 35 Ill. Adm. Code 101.Subpart C the petition must include:

- a) A copy of the OSFM's "Eligibility and Deductibility Final Determination" letter;
- b) A complete and precise description of the underground storage tank site, including the location of the site, including the county, the number of underground storage tanks on-site, the substance(s) stored in each tank, the date of the tank's registration, and the date of Illinois Emergency Management Agency notification;
- c) A statement specifying the date of service of the OSFM's final determination letter and documentation to demonstrate the petition's timely filing;
- d) A statement specifying the grounds of appeal; and
- e) If the owner or operator is represented by counsel, an appearance must be filed in conjunction with the petition.

Section 105.508 OSFM Record and Appearance

- a) Within 14 days after a petition for review of an OSFM eligibility or deductibility determination, the attorney representing the OSFM must file an appearance with the Board.
- b) The OSFM must file the entire OSFM record of its decision with the Board in accordance with Section 105.116. The OSFM record must include:
 - 1) The request for OSFM determination of eligibility or deductibility;

- 2) Correspondence with the petitioner;
- 3) The denial letter; and
- 4) Any other information the OSFM relied upon in making its determination.

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

Section 105.510 Location of Hearing

The hearing will be held in Springfield, in Chicago, by videoconference (see 35 Ill. Adm. Code 101.600(b)), or in such other location as the hearing officer or the Board may designate to prevent material prejudice or undue delay. Upon the proceeding being set for hearing, the Clerk will cause notice of the hearing to be published. Public notice will be published at least 21 days before the hearing by public advertisement in a newspaper of general circulation in the county in which the LUST site in question is located. Nothing in this Section precludes holding the hearing by videoconference under 35 Ill. Adm. Code 101.600(b).

(Source: Amended at 41 Ill. Reg. 10084, effective July 5, 2017)

SUBPART F: PSD PERMIT APPEALS

Section 105.600 Applicability

This Subpart applies to proceedings before the Board concerning appeals from final PSD permit determinations made under Section 9.1(d) of the Act and 35 Ill. Adm. Code Part 204.

Section 105.602 Parties

- a) Petitioner. The person who files a petition for review of the Agency's final decision must be named the petitioner.
- b) Respondent. The Agency must be named the respondent. If a petition is filed under Section 105.604(c) of this Subpart by a person other than the permit applicant, the permit applicant must be named as a respondent in addition to the Agency.

Section 105.604 Who May File a Petition for Review

- a) If the Agency refused to grant or grants with conditions a PSD permit under Section 9.1(d) of the Act and 35 Ill. Adm. Code Part 204, the applicant may petition for a hearing before the Board to contest the decision of the Agency. [415 ILCS 5/40.3(a)(1)]
- b) If the Agency fails to act on an application for a PSD permit within the time frame specified in Section 39(f)(3) of the Act, the applicant may petition for a hearing

before the Board to compel the Agency to act on the application in a time that is deemed reasonable by the Board. [415 ILCS 5/40.3(a)(1)]

- c) Any person who participated in the Agency public comment process for a PSD permit and is either aggrieved or has an interest that is or may be adversely affected by the PSD permit may petition for a hearing before the Board to contest the decision of the Agency. If the petitioner failed to participate in the Agency's public comment process, the person may still petition for hearing, but only upon issues where the final permit conditions reflect changes from the draft permit that was made available during the Agency public comment process. [415 ILCS 5/40.3(a)(2)]

Section 105.606 Time to File Petition for Review

- a) Except as provided in subsection (b), if a person who may petition the Board under Section 105.604 of this Subpart wishes to appeal the Agency's final decision to the Board under this Subpart, the person must file the petition with the Clerk within 35 days after the date of the Agency's final permit action.
- b) If the permit applicant wishes to appeal the Agency's failure to act on an application for a PSD permit within the time frame specified in Section 39(f)(3) of the Act, the person must file a petition for review with the Clerk before the Agency denies or issues the final permit.

Section 105.608 Petition Content Requirements

- a) For petitions under Section 105.604(a) or (c) of this Subpart, all pertinent information in support of each issue raised for review shall be contained within the body of the petition. The Board will not consider arguments, assertions, claims, or other information incorporated into the petition by reference. In addition to the requirements of 35 Ill. Adm. Code 101.Subpart C, the petition must include:
- i) The Agency's final decision or issued PSD permit;
 - ii) A statement as to how the petitioner participated in the Agency public comment process;
 - iii) All facts necessary to demonstrate that the petitioner is aggrieved or has an interest that is or may be adversely affected;
 - iv) The issues proposed for review, citing to a specific permit term or condition where applicable and to the Agency record where those issues were raised with reasonable specificity during the public comment period, citing to any relevant page numbers in the public comments submitted to the Agency and attaching this public comment to the petition. If the issues

proposed for review were not raised with reasonable specificity during the public comment period, the petition must explain why such issues were not required to be raised during the Agency public comment process; and

v) An explanation why the Agency's previous response to the issues proposed for review, if any, was:

1. Clearly erroneous; or

2. An exercise of discretion or an important policy consideration that the Board should, in its discretion, review. [415 ILCS 5/40.3(a)(2)]

b) For petitions under Section 105.604(b) of this Subpart, in addition to the requirements of 35 Ill. Adm. Code 101, Subpart C, the petition must also include the date that a complete permit application for a PSD permit was submitted to the Agency and an explanation as to why the submittal made on such date made the application complete.

c) For petitions under Section 105.604(a) or (c) of this Subpart, the petition may include a request to stay the effectiveness of any final Agency action on a PSD permit application until final action is taken by the Board under Section 40.3 of the Act. Any stay request must include a clear delineation of all the contested conditions of the PSD permit. To the extent that a stay of any or all of the uncontested conditions of the permit is sought, any stay request must indicate how these uncontested conditions would be affected by the Board's review of the contested conditions.

d) For petitions under Section 105.604(c) of this Subpart, any stay request must also demonstrate:

i) That an immediate stay is required in order to preserve the status quo without endangering the public;

ii) That it is not contrary to public policy; and

iii) That there is a reasonable likelihood of success on the merits.

Section 105.610 Board Standards for Granting Stays

a) If requested by the permit applicant, the Board may stay the effectiveness of any final Agency action on a PSD permit application during the pendency of the review process. In such cases, the Board shall stay the effectiveness of all the contested conditions of the PSD permit and may stay the effectiveness of any or all uncontested conditions only if the Board determines that the uncontested conditions would be affected by its review of contested conditions. Any stays

granted by the Board shall be deemed effective upon the date of final Agency action appealed by the applicant. [415 ILCS 5/40.3(d)(2)]

- b) If requested by a party other than the permit applicant, the Board may stay the effectiveness of any final Agency action on a PSD permit application during the pendency of the review process. In such cases, the Board may stay the effectiveness of all the contested conditions of the PSD permit and may stay the effectiveness of any or all uncontested conditions only if the Board determines that the uncontested conditions would be affected by its review of contested conditions. The party requesting the stay has the burden of demonstrating that an immediate stay is required in order to preserve the status quo without endangering the public, that it is not contrary to public policy and that there is a reasonable likelihood of success on the merits. Any stay granted by the Board shall be deemed effective upon the date of final Agency action appealed under Section 105.606 of this Subpart and shall remain in effect until a decision is issued by the Board on the petition. [415 ILCS 5/40.3(d)(3)]

Section 105.612 The Agency Record

- a) The Agency must file a copy of its entire Agency record of its decision with the Clerk in accordance with Section 105.116.
- b) The Agency record must include:
- i) Any permit application or other request that resulted in the Agency's final decision;
 - ii) Correspondence with the applicant and any documents or material submitted by the applicant to the Agency related to the permit application;
 - iii) The project summary, statement of basis or fact sheet;
 - iv) The Agency public hearing record of any Agency public hearing held under 35 Ill. Adm. Code 252.205, including any transcripts and exhibits;
 - v) Any written comments received during the Agency public comment period under 35 Ill. Adm. Code 252.201, including any extension or reopening under 35 Ill. Adm. Code 252.208;
 - vi) The response to comments required by 35 Ill. Adm. Code 252.210 and any new material placed in the Agency record under that Section;
 - vii) The final permit; and
 - viii) Any other information the Agency relied upon in making its final decision.

Section 105.614 Board Hearing

Except as provided in subsections (a) and (b), the Board will conduct a public hearing, in accordance with 35 Ill. Adm. Code 101, Subpart F, upon an appropriately filed petition for review under this Subpart. The hearing and decision of the Board will be based exclusively on the Agency record at the time the permit or decision was issued, unless the parties agree to supplement the Agency record. Any PSD permit issued by the Agency shall be upheld by the Board if the technical decisions contained therein reflect considered judgment by the Agency. [415 ILCS 5/40.3(d)(1)]

- a) The Board will not hold a hearing on a petition for review under this Subpart if the Board disposes of the petition on a motion for summary judgment brought under 35 Ill. Adm. Code 101.516.
- b) The Board will not hold a hearing on a petition for review under this Subpart if the Board determines that:
 - i) The petition is frivolous; or
 - ii) The petition lacks facially adequate factual statements as required by Section 105.608 of this Subpart.
- c) If the Board determines to hold a hearing, the Clerk will give notice of the hearing under 35 Ill. Adm. Code 101.602.

APPENDIX A Agency LUST Final Decisions that are Reviewable (Repealed)

(Source: Repealed at 41 Ill. Reg. 10084, effective July 5, 2017)

105.APPENDIX B Comparison of Former and Current Rules (Repealed)

(Source: Repealed at 29 Ill. Reg. 8811, effective June 8, 2005)

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION
CHAPTER II: ENVIRONMENTAL PROTECTION
AGENCY

PART 252
PUBLIC PARTICIPATION IN THE
AIR POLLUTION CONTROL PERMIT PROGRAM

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SUBPART D: AGENCY ACTION

Section
252.401 Final Permit Action

AUTHORITY: Implementing and authorized by Sections 4, 9.1(d),
9.1(e), and 39, 39.1(c) and 39.1(d) of the Environmental
Protection Act [415 ILCS 5/4, 9.1(d), 9.1(e), 39, 39(f)(2),
39.1(c) and 39.1(d)].

SOURCE: Adopted at 4 Ill. Reg. 10, p. 246, effective February 22, 1980; old rules repealed and new rules adopted at 8 Ill. Reg. 8197, effective June 1, 1984; amended at 17 Ill. Reg. 9684, effective June 10, 1993; amended at 22 Ill. Reg. 19253, effective October 13, 1998; amended at 42 Ill. Reg. _____, effective _____.

SUBPART A: INTRODUCTION

Section 252.101 Purpose

These rules are adopted to:

- a) Specify public participation procedures which ~~must~~ shall accompany the processing of certain air pollution permit applications for certain sources of air pollution by the Illinois Environmental Protection Agency ~~(Agency);~~ and
- b) Provide the public with an opportunity to comment on certain proposed air pollution permits for certain sources of air pollution that ~~are~~ may be of public interest.

(Source: Amended at Ill. Reg. _____, effective _____.)

~~(Source: Amended at 17 Ill. Reg. 9684, effective June 10, 1993)~~

Section 252.102 Abbreviations and Acronyms

ACS	<u>Alternative Control Strategies</u>
Act	<u>Illinois Environmental Protection Act</u>
Agency	<u>Illinois Environmental Protection Agency</u>
Board	<u>Illinois Pollution Control Board</u>
CAA	<u>Clean Air Act</u>
CAAPP	<u>Clean Air Act Permit Program</u>
HAPs	<u>Hazardous Air Pollutant</u>
MACT	<u>Maximum Achievable Control Technology</u>
MSSCAM	<u>Major Stationary Sources Construction and Modification</u>
NSR	<u>New Source Review</u>
NANSR	<u>Nonattainment Area New Source Review</u>
PSD	<u>Prevention of Significant Deterioration of Air Quality</u>
USEPA	<u>United States Environmental Protection Agency</u>

(Source: Added at Ill. Reg. _____, effective _____.)

Section 252.103 Definitions

- a) NANSR means Illinois' rules for MSSCAM at 35 Ill. Adm. Code Part 203.
- b) Other terms in these rules have the same meaning as defined in Sections 3 and 39.5(1) of the Act and the Board Rules and Regulations on Air Pollution, 35 Ill. Adm. Code: Subtitle B, Chapter I, as appropriate to the subject matter of the provisions.

(Source: Added at Ill. Reg. effective _____)

Section 252.104~~2~~ Applicability

- a) This Part applies to all ~~permit~~ applications filed with the Agency for:
 - 1) Permits for the construction of new major stationary source or a major modification of a major stationary source pursuant to the Major Stationary Sources Construction and Modification, the New Source Review (NANSR) rules, 35 Ill. Adm. Code Part 203, for major new sources and major modifications;
 - 2) Permits for the construction of a new major stationary source or a major modification of a major stationary source pursuant to the federal rules for Prevention of Significant Deterioration of Air Quality (PSD) rules, 35 Ill. Adm. Code Part 20440 CFR 52.21, for construction of major new sources and major modifications;
 - 3) Permits for the construction of a sources or a modifications of a source which would constitute major a new major stationary sources or a major modifications of a major stationary source, subject to public notice participation pursuant to subsections (a)(1) or (2) above, if they were not accompanied by contemporaneous emissions decreases or if federally enforceable significant restrictions were not placed on the source or modification by the permit;
 - 4) Permits for the use of Alternative Control Strategies (ACS) pursuant to 35 Ill. Adm. Code Part 202;
 - 5) Permits to operate sources pursuant to the CAAPP, Section 39.5 of the Environmental Protection Act

- ~~(Act)~~, 415 ILCS 5/39.5, ~~(the Clean Air Act Permit Program (CAAPP))~~ and significant modifications of any permit issued thereunder;
- 6) Permits to operate sources which contain federally enforceable conditions including permits which exclude sources from the applicability of the permitting requirements described in subsections (a) (1), (a) (2), or (a) (5) ~~above~~;
 - 7) Permits for the construction, ~~or reconstruction, or modification of~~ major sources of hazardous air pollutants (HAPs) that require a determination of case-by-case Maximum Achievable Control Technology (MACT), pursuant to Sections 9.1(d) and 39(f) of the Act, 415 ILCS 5/9.1(d) and 39(f), and Section 112(g) and Section 112(j) of the Clean Air Act (CAA), 42 USC 7412(g) and (j)).;
 - 8) Permits for the construction of a source of public interest or emission units of public interest at a source, the criteria for which are outlined in subsection (b) below; and
 - 9) Revisions to permits described in subsections (a) (1), (a) (2), (a) (3), (a) (4), (a) (5), (a) (6) and (a) (7) ~~above~~ as specified by applicable regulations. This Part shall apply to all revisions which: revise any standard established on a case-by-case basis; alter conditions imposed to meet requirements for emissions offsets; or relax testing, monitoring, recordkeeping, or reporting requirements.
- b) The Director of the Agency shall determine whether an source or emission units is are of public interest. In making the decision, the Director of the Agency shall consider:
- 1) The type of permit for which the application is made;
 - 2) The nature and amount of pollutants which will be emitted by the source;
 - 3) Possible effects of the emissions on health and the environment;
 - 4) The location of the source;
 - 5) The interest in the source exhibited by the public, based on comments and inquiries received by the Agency;

- 6) Other factors which are distinctive to the source;
and
- 7) The proposed action by the Agency.

(Source: Amended at Ill. Reg. _____,
effective _____)

(Source: Amended at 22 Ill. Reg. 19253, effective October
13, 1998)

~~Section 252.103 — Application for a Preventing of Significant
Deterioration Permit~~

~~Applicable procedures of the Consolidated Permit
Regulations, 40 CFR 124, shall be followed for the
issuance of permits pursuant to the federal PSD rules
for new major stationary sources and major
modifications.~~

- ~~b) Applicable procedures of this Part shall also be
followed for issuance of such permits.~~
- ~~c) The following shall apply regarding denials of PSD
permit applications:~~
 - ~~1) The procedures of this Part shall also apply if
the Agency proposed to deny an application for a
PSD permit if the reasons for denial are those for
which appeal to the Administrator of the United
States Environmental Protection Agency (USEPA)
would be necessary. Such reasons may relate to
requirements of the PSD rules which have been
subject to interpretation by USEPA, including but
not limited to the methodology for performing air
quality analyses, the need for gathering
site-specific ambient air quality data, the
procedures for evaluating Best Available Control
Technology (BACT), and the criteria used to
establish BACT.~~
 - ~~2) For those PSD permits for which public comment is
required for a proposed denial of a permit
pursuant to subsection (1) above, the following
shall apply:~~
 - ~~i) Where the procedures of this Part refer to a
draft permit, they shall also apply to a
draft permit denial letter; and~~
 - ~~ii) Where the procedures of this Part refer to a
notice of intent to issue, they shall also~~

~~apply to a notice of intent to deny.~~

- ~~3) Following a public comment period on the proposed denial of the permit, if the Agency determines that a permit should be issued, a public comment period shall be held on the proposed issuance of the permit.~~

~~(Source: Section repealed, new Section added at 17 Ill. Reg. 9684, effective June 10, 1993)~~

~~Section 252.104 Definitions~~

~~Terms in these rules have the same meaning as defined in Section 3 of the Act and the Pollution Control Board Rules and Regulations on Air Pollution, 35 Ill. Adm. Code: Subtitle B, Chapter 1, as appropriate to the subject matter of the permit.~~

~~(Source: Amended at 17 Ill. Reg. 9684, effective June 10, 1993)~~

~~Section 252.105 Consolidation~~

- ~~a) For a combined PSD and NANSR permit, the Agency shall consolidate the public participation activities when the operations to be permitted are similar or related.~~

- ~~4) For other permits subject to this Part, the Agency may consolidate the public participation activities for two or more permits subject to these rules when the operations to be permitted are similar, related, or in close geographical proximity, where practicable.~~

~~(Source: Amended at 17 Ill. Reg. 9684, effective June 10, 1993)~~

~~(Source: Amended at Ill. Reg. _____, effective _____)~~

~~SUBPART B: PROCEDURES FOR PUBLIC REVIEW~~

~~Section 252.201 Notice and Opportunity to Comment~~

- ~~a) The Agency shall issue a notice for the issuance of any permit described in Section 252.104 and 2 of this Part and renewal of any operating permit described in Section 252.104.2 of this Part, and permit actions described in Section 252.103 of this Part.~~
- ~~b) The notice shall be sent to:~~
- ~~1) The public, at least one time, by display advertisement in a newspaper of general circulation in the area where the source is~~

located;

- 2) Local government air pollution control offices within Illinois that are in the area affected by the source;
- 3) The chief executives of the municipality and county in which the source is to be located, including the mayor or president, clerk, county board chairman, county clerk, and state's attorney;
- 4) Members of the General Assembly from the legislative district in which the source is located;
- 5) Any state whose air quality may be affected and which is contiguous to Illinois or which is within 50 miles of the source;
- ~~6) Other officials and agencies identified in 40 CFR 51.24(g)(iv) (1983) for PSD sources only;~~
- ~~7) The permit applicant; and~~
- ~~8) Persons on the public participation mailing list for the air pollution permit program;~~
- 8) For purposes of PSD permits, in addition to the requirements set forth in subsections (b)(1) through (8), the notice shall also be sent to the USEPA, any comprehensive regional land use planning agency and any State, Federal Land Manager, or Native American Governing Body whose lands may be affected by emissions from the regulated activity. -

c) The notice shall include:

- 1) The name and address of the applicant and the source;
- ~~2) The location of the source if different from the applicant's address;~~
- ~~23) The activity or activities involved in the permit action;~~
- 4) ~~For a proposed significant modification, a description of the change in the amount or character of the emissions which may result from the modification;~~

- 35) The preliminary decision of the Agency to grant the permit;
- 46) For the proposed issuance of a PSD permit, the degree of ambient air increment consumed by the project;
- 57) For a case-by-case MACT determination pursuant to Section 112(g) and ~~Section 112(j)~~ of the CAA, a description of the emission limitation or work practice standard in the draft permit that constitutes MACT;
- 68) The location of the documents available for public review;
- 79) A request for written comments on the Agency's draft proposed permit;
- 810) The date by which comments ~~must~~ shall be postmarked;
- 911) Instructions on how to request a public hearing if a decision to hold a hearing has not already been made pursuant to Section 252.205(a) or (b); and
- 1012) The name, address, and telephone number of the Agency contact person from whom the public may obtain additional information.

(Agency Note: Material properly claimed as trade secret or confidential pursuant to Sections 7 and 7.1 of the Act and 211.1 Adm. Code Part 1827 will not be subject to public disclosure under this Part. An applicant claiming a trade secret shall provide, in addition to the complete application, a copy of the application for public notice in which the material claimed as trade secret has been deleted.)

- d) The notice to the permit applicant shall also include the draft permit and project summary, fact sheet or statement of basis or fact sheet required by Section 252.203 ~~of this Part.~~
- e) The notice shall provide for a 30-day public comment period. The Agency may extend the comment period upon written request if any applicable statutory period for the Agency decision, as prescribed in Section 39 of the Act, allows for an extension.

(Source: Amended at Ill. Reg. _____,
effective _____)

~~(Source: Amended at 22 Ill. Reg. 19253, effective October 13, 1998)~~

Section 252.202 Draft Permit

The Agency shall prepare for public review a draft permit, with including findings and proposed conditions.

~~(Source: Amended at Ill. Reg. _____, effective _____)~~

~~(Source: Amended at 17 Ill. Reg. 9684, effective June 10, 1993)~~

Section 252.203 Project Summary, Fact Sheet and Statement of Basis or Fact Sheet

- a) The Agency shall prepare a project summary or statement basis fact sheet to accompany the draft permit for a new major stationary new source, major existing source, or major modification of a major stationary source, operation of a source pursuant to CAAPP or a significant modification of a CAAPP permit. The fact sheet project summary or statement of basis shall describe the basis of the Agency's decision to grant the permit including an explanation of the source's effect on ambient air quality.
- b) The Agency shall prepare a fact sheet statement of basis for every draft permit for which a project summary or statement of basis fact sheet is not prepared.

~~(Source: Section repealed, new Section added at 17 Ill. Reg. 9684, effective June 10, 1993)~~

~~(Source: Amended at Ill. Reg. _____, effective _____)~~

Section 252.204 Availability of Documents

- a) Copies of the following documents shall be made available for public inspection during the public comment period:
- 1) The public notice;
 - 2) The project summary, fact sheet or statement of basis or fact sheet;
 - 3) The draft permit;
 - 4) The permit application, including any compliance

plans;

- 5) For purposes of a draft PSD permit, this shall also include any additional supporting data furnished by the applicant and other information the Agency relied upon in making its proposed decision.
- b) Copies of the documents shall be placed in the Bureau of Division of Air's Pollution Control's offices at 1021340 North Ninth Street Grand Avenue East, Springfield, Illinois 62794-9276. and
- c) For purposes of PSD permits, copies of documents shall also be placed in the Division-Bureau of Air's Pollution Control's regional or district office closest to the location of the source.
- de) All documents listed in subsection (a) above shall be available in accordance with procedures of the Agency and of the Pollution Control Board adopted pursuant to 35 Ill. Adm. Code Part 130 +20, and Sections 7 and 7.1 of the Act.

(Source: Amended at Ill. Reg. effective _____)

(Source: Section repealed, new Section added at 17 Ill. Reg. 9684, effective June 10, 1993)

Section 252.205 Opportunity for Public Hearing

- a) A public hearing shall be held on any action subject to these rules where applicable law or rule provides the applicant opportunity for hearing and the applicant makes a written request for a hearing.
- b) The Director of the Agency or his/her designee shall order that a hearing be held on a permit application subject to these rules when the Agency has determined that a hearing would serve the interests of the public or of the Agency. In making this determination, the Agency shall consider:
- 1) The level of public interest as indicated by the inquiries and comments received by the Agency on the draft permit;
 - 2) The opportunity to increase public understanding of the project and of the Agency's proposed decision by means of public hearing;
 - 3) Receipt by the Agency of a written request for a

hearing citing material issues with respect to the terms and conditions of the draft permit from:

- A) A significant number of persons, to be determined by the Director of the Agency, either individually or in a petition;
- B) A member of the General Assembly representing the district in which the source is located; or
- C) A chief executive officer from a county or municipality in which the source is located as described in Section 252.201(b) (3) of this Part.

~~(Source: Added at 17 Ill. Reg. 9684, effective June 10, 1993)~~

~~(Source: Amended at Ill. Reg. effective)~~

Section 252.206 Procedures for Public Hearings

- a) Except as provided in subsection (b) below, hearings shall be conducted in accordance with the Agency's "Procedures for Permit and Closure Plan Hearings" (35 Ill. Adm. Code Part 166: Subpart A, Informational Permit and Closure Plan Hearings).
- b) The following types of hearings shall be conducted in accordance with the Agency's "Procedures for Permit and Closure Plan Hearings" (35 Ill. Adm. Code Part 166: Subpart B, Contested Case Permit Hearings):
 - ~~1) Hearings requested by the applicant pursuant to Section 39(f)(3) of the Act on a proposed action which includes the Agency's determination with respect to BACT or LAER or case by case MACT;~~
 - ~~2) Hearings requested by the ACS permit applicant pursuant to Section 39.1(d) of the Act.~~
- c) Notwithstanding subsection (b) above, persons requesting hearings subject to the Contested Case Permit Hearings (35 Ill. Adm. Code Part 166: Subpart B) may waive their rights to the procedures of the Contested Case Permit Hearings by notifying the hearing officer to that effect. Where persons waive their rights to Contested Case Permit Hearings, such hearings shall be held in accordance with the procedures of Informational Permit and Closure Plan Hearings (35 Ill. Adm. Code Part 166: Subpart A).

~~(Source: Added at 22 Ill. Reg. 19253, effective October 13,~~

1998)
(Source: Amended at Ill. Reg. _____,
effective _____)

Section 252.207 Obligation to Raise Issues and Provide
Information During the Public Comment Period
for PSD Permits

All persons, including applicants, who believe any condition of a draft PSD permit is inappropriate or that the Agency's tentative decision to prepare a draft PSD permit is inappropriate, shall raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position by the close of the public comment period. Any supporting materials which are submitted shall be submitted in full and may not be incorporated by reference, unless they are already part of the administrative record in the same proceeding, or consist of State or Federal statutes and regulations, USEPA documents of general applicability, or other generally available reference materials.

(Source: Added at Ill. Reg. _____,
effective _____)

Section 252.208 Reopening of the Public Comment Period for
PSD Permits

- a) The Agency may order the public comment period reopened. The public notice of any comment period under this paragraph shall be issued under Section 252.201, and shall define the scope of the reopening including an identification of those issues to which the requirements of this Section apply.
- b) Comments filed during the reopened comment period shall be limited to the issues that are the subject of the reopened public comment period as set forth in the notice that caused its reopening. When the public comment period is reopened under this Section, all persons, including the applicant, who believe any relevant condition of a draft permit is inappropriate or that the Agency's decision to prepare a draft permit is inappropriate, shall submit all reasonably available factual grounds supporting their position, including all supporting material, by the close of the public comment period.

(Source: Added at Ill. Reg. _____,
effective _____)

Section 252.209 Issuance of a Final PSD Permit Decision

After the close of the public comment period on a draft PSD permit under Section 252.201 or 252.208, the Agency shall provide notice of the final PSD permit decision to the applicant and each person who has submitted written comments or requested notice of the final permit decision. This notice shall include reference to the procedures for appealing a decision on the final PSD permit under Section 40.3 of the Act and 35 Ill. Adm. Code 105. For purposes of this Section, a final permit decision means a final decision to issue or modify a PSD permit.

(Source: Added at Ill. Reg. effective _____)

Section 252.210 Response to Comments for a Final PSD Permit Decision

- a) By the date that any final PSD permit decision is issued, the Agency shall issue a response to comments. This response shall briefly describe and respond to all significant comments on the draft permit raised during the public comment period, or during any hearing. The Agency may group related comments together and provide one unified response for each issue raised; and
- b) Any documents, excluding statutory or regulatory references, cited in the response to comments shall be included in the administrative record for the final permit decision. If new points are raised or new material supplied during the public comment period, the Agency may, in addition to formally providing a written response to comments, document its response to those matters by adding new materials to the administrative record.

(Source: Added at Ill. Reg. effective _____)

Section 252.211 Administrative Record for a Final PSD Permit Decision

- a) The Agency shall base final PSD permit decisions on the administrative record as defined in this Section.
- b) The administrative record for any final permit decision shall consist of the administrative record for the draft permit and:
 - 1) All comments received during the public comment period under Section 252.201 (including any reopening under Section 252.208);
 - 2) The transcript of any hearing held under Section

252.205;

- 3) Any written materials submitted at such a hearing;
- 4) The response to comments required by Section 252.210 and any new material placed in the record under that Section;
- 5) Any other information the Agency relied upon in making its final decision; and
- 6) The final permit.

(Source: Added at Ill. Reg.
effective)

SUBPART C: USEPA REVIEW OF CAAPP PERMITS AND OBJECTION PROCEDURES

Section 252.301 USEPA Review of and Objection to Proposed CAAPP Permits

- ~~a)~~ Notice shall be provided to USEPA at the same time it is provided to the public pursuant to Section 252.201 of this Part.
- ~~ab)~~ For draft CAAPP permits subject to review under Section 39.5 of the Act, following the public notice and comment period provided for by Section 252.201 of this Part, the Agency shall consider all comments received, and determine the contents of a proposed CAAPP permit. The proposed CAAPP permit shall be provided to USEPA for review and comment for a period of 45 days unless USEPA waives review.
- ~~be)~~ If USEPA objects to the contents of a proposed CAAPP permit in writing and with a justification for its objections as provided in Title V of the CAAClean Air Act as amended (42 USC 17401 et seq.) and regulations promulgated thereunder, the Agency shall respond to USEPA's objection. The Agency shall provide the applicant and any person who participated in the public comment process under this Part 10 days to submit written comments to the Agency contact person described at Section 252.201(c)(1,4) ~~of this Part~~ regarding any revisions which the Agency is proposing to make in response to USEPA's objections. The Agency may then revise and resubmit the proposed CAAPP permit without any further public participation within 90 days after the date of the objection.
- ~~cd)~~ If USEPA does not object to the contents of a proposed CAAPP permit in writing and with a justification for

its objections in accordance with procedures established under Title V of the ~~CAA~~lean Air Act as amended, the Agency shall issue the proposed permit as the CAAPP permit without further change.

- de) If USEPA does not object in writing to issuance of a proposed CAAPP permit, any person may petition USEPA within 60 days after expiration of the 45-day review period to make such objection in accordance with applicable procedures established under Title V of the ~~CAA~~lean Air Act.
- ef) If the CAAPP permit has not yet been issued and USEPA objects to the proposed permit as a result of a petition, the Agency shall not issue the permit until USEPA's objection has been resolved. The Agency shall provide for a 10-day comment period as set forth in subsection ~~(be)~~ above. A petition does not, however, stay the effectiveness of a permit or its requirements if the permit was issued after expiration of the 45-day review period and prior to a USEPA objection.
- fg) If the Agency has issued a CAAPP permit after expiration of the 45-day review period and prior to receipt of a USEPA objection, the Agency may, after receiving an objection from USEPA, revise and resubmit the permit to USEPA after providing for 10-day comment period as set forth in subsection ~~(be)~~ above. If the Agency fails to submit a revised permit in response to the objection, USEPA shall modify, terminate or revoke the permit, pursuant to the ~~CAA~~Clean Air Act as amended.

~~(Source: Added at 17 Ill. Reg. 9684, effective June 10, 1993)~~

~~(Source: Amended at 39 Ill. Reg. effective)~~

SUBPART D: AGENCY ACTION

Section 252.401 Final Permit Action

After the close of the comment period including the period for USEPA's review of a proposed permit, the Agency shall take final action. The Agency shall notify the applicant and each person who has submitted written comments or requested notice of the final permit decision.

(Source: Added at 17 Ill. Reg. 9684, effective June 10, 1993)

DRAFT

State of Illinois
Illinois Environmental Protection Agency



Prevention of Significant Deterioration

The federal Clean Air Act establishes a program called Prevention of Significant Deterioration (PSD). The PSD program applies to new major stationary sources, and major modifications at existing major sources. In both cases, the source is a collection of stationary emission units at one plant, facility or site and not an individual emissions unit. In Illinois, the Illinois EPA administers the PSD permit program. The PSD permit program does not regulate cars, trucks, trains or other mobile sources.

PSD was established to reduce the emissions and impacts from a new source or modification at an existing source and, in attainment areas, ensure that such projects would not cause the surrounding air to violate the National Ambient Air Quality Standards (NAAQS). NAAQS are standards for ambient air quality set by U.S. EPA for certain pollutants to protect public health and welfare. NAAQS have been set for ozone, particulate (PM₁₀ and PM_{2.5}), sulfur dioxide, nitrogen dioxide, carbon monoxide and lead. The PSD program does not apply to hazardous air pollutants which are subject to separate requirements under the Clean Air Act.

A related permit program, nonattainment new source review (NNSR), regulates major source construction permitting in those areas and pollutants that are designated nonattainment of the relevant NAAQS.

How does PSD protect air quality?

Prior to beginning construction of a new major source or major modification to an existing major source, the company or other applicant must obtain a PSD construction permit. The application for a PSD permit must include specific details including the type of technology that will be used to control emissions, and modelling of the emissions to show that the new project will not cause the ambient air quality to violate the NAAQS. These requirements for a PSD permit application apply to regulated pollutants that would potentially be emitted in major or significant amounts.

The Illinois EPA must determine best available control technology (BACT) and concur with the applicant's analysis of air quality impacts and other impacts from a proposed project.

Illinois' PSD Rulemaking

The Illinois EPA is currently developing proposed rules to establish an Illinois program for PSD. Once the Illinois Pollution Control Board, adopts rules for a State PSD program, they will be submitted to U.S. EPA for approval. The rules being developed must be at least as stringent as the current federal program

For more information, see the [Contact](#) listed at the end of this document.



Prevention of Significant Deterioration

Determining if a proposed source is subject to PSD Permitting

For certain categories of sources, PSD defines a major new source as one that have the potential to emit more than 100 tons per year for any one regulated pollutant. These listed categories include, among others, steam power plants, chemical process plants, steel mills and refineries. For all other sources, the major source level is 250 tons per year of any one regulated pollutant. Once a proposed source is major for one regulated pollutant other regulated pollutants emitted in significant amounts are also subject to PSD.

Determining if a proposed major modification is subject to PSD Permitting

A major modification to an existing major source requires a physical or operational change and is based on whether the project will cause a significant emission increase of a regulated pollutant. Significant air pollutant emission rates are set for each regulated pollutant. For example, the significant emission rates for carbon monoxide, nitrogen oxides and PM_{2.5} are set at 100, 40 and 10 tons per year, respectively.

Greenhouse gases are regulated only to the extent that the source or modification is already subject to PSD permitting and greenhouse gases would potentially be emitted in a significant amount, i.e., 75,000 tons per year as carbon dioxide equivalents.

Attainment Areas

U.S. EPA designates areas as attainment or unclassifiable or as nonattainment relative to the NAAQS.

For nonattainment areas, States are required to develop plans to bring the areas into attainment with the NAAQS subject to review by U.S. EPA.

As air quality improves or new NAAQS are adopted USEPA updates its designations.

Requirements for PSD Application

An application for a PSD permit must show that the requirements for PSD would be met for the subject pollutants including the following requirements. Subject pollutants are those regulated pollutants that would be emitted in major or significant amounts.:

1. Demonstration that Best Available Control Technology (BACT) will be used.
2. An air quality analysis
 - NAAQS analysis
 - Increment analysis
3. Additional impact analysis to visibility, soils and vegetation

Prevention of Significant Deterioration

Best Available Control Technology (BACT)

As provided by the Clean Air Act, BACT is an emissions limitation based on the maximum degree of reduction for a pollutant that is achievable for a particular project or emissions unit as determined by the permitting authority taking into account energy, environmental and economic impacts. BACT may reflect use of add-on pollution control equipment, production processes, or both. The purpose of the BACT requirement is to ensure that new and modified emissions units are constructed and operated with state-of-art emission control technology.

Air Quality Analysis

All PSD permit applications require an air quality analysis to demonstrate that emissions of subject pollutants from a project will not cause or contribute to a violation of a NAAQS or applicable PSD increments. Increments are limits on degradation of air quality for certain pollutants set by the PSD program and may, in practice, be more restrictive than the NAAQS.

Additional Impact Analysis

Additionally, an applicant must assess the impact of emissions on soils and vegetation in the vicinity of the proposed project.

Public Involvement

After completing its review of the application, the Illinois EPA prepares a draft PSD permit for public review. During the public comment period, the Illinois EPA accepts comments on the draft permit and reviews those comments prior to making a final decision on the application.

When the Illinois EPA holds a public comment period on a draft PSD permit, the draft permit and accompanying project summary prepared by the Illinois EPA are posted on the following website <http://www.epa.illinois.gov/public-notice/boa-notice/index>. If you wish to be added to the Illinois EPA's mailing list or e-mail list, please contact the Office of Community Relations.

Contacts

Brad Frost
Illinois EPA
Office of Community Relations
Illinois EPA
217/782-7027
brad.frost@illinois.gov

PSD Rulemaking

Regulatory Proposal

Illinois' Prevention of Significant Deterioration Program

The Illinois EPA has prepared proposed regulations for a state program for Prevention of Significant Deterioration (PSD). **The Illinois EPA will be accepting public input on the proposed regulations through November 1, 2017.**

The Illinois EPA currently issues PSD permits for the U.S. EPA under a delegation agreement. In 2015, the Illinois Environmental Protection Act was amended to require that the Illinois Pollution Control Board (IPCB) establish a state PSD program, 415 ILCS 5/9.1(c). In response, the Illinois EPA has developed proposed state PSD regulations which it plans to submit to the IPCB for adoption.

The Illinois EPA is proposing a state PSD program based on the federal PSD regulations that it currently implements on behalf of U.S. EPA. The Illinois EPA is proposing that these new regulations be adopted as 35 Illinois Administrative Code (IAC) Part 204, Prevention of Significant Deterioration.

In addition, the Illinois EPA is proposing amendments to the IPCB's procedural regulations to accommodate appeals of PSD permits to the IPCB. These changes are taking place in 35 IAC 101, General Rules, and 35 IAC 105, Appeals of Final Decisions of State Agencies.

Additionally, while not a part of the PSD regulatory package to be submitted to the IPCB, the Illinois EPA will be proposing changes to Illinois EPA rules, 35 IAC 252, Public Participation in the Air Pollution Control Permit Program.

These new PSD regulations will be a companion program to Illinois' current regulations at 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM). MSSCAM addresses the permitting of proposed major new sources and major modifications at existing major sources that would emit a pollutant for which the area is designated non-attainment.

Opportunity for Public Review

Prior to submission to the IPCB, the Illinois EPA is making the proposed new PSD regulation and revisions of the existing regulations available for public review until **November 1, 2017**. Links to these draft documents are found below.

Provide Input on the Rule

If you would like to provide input into the draft regulations please send it via e-mail to:

EPA.PSDRulemaking@illinois.gov

Process for the Rulemaking

After public outreach, the Illinois EPA will finalize the proposed state PSD regulations proposal for submittal to the IPCB for consideration. The IPCB will then initiate a rulemaking proceeding based on the proposal. As part of its rulemaking, the IPCB will solicit formal comments and hold hearings prior to making a final decision. After the regulations are submitted to the IPCB, information will be available on the IPCB website .

The Illinois EPA will, separately, initiate an Agency rulemaking proceeding on the amendments to 35 IAC Part 252.

Links

PSD Regulatory Proposal

- New Draft Rule, 35 IAC 204
- Revised Draft Rule, 35 IAC 101
- Revised Draft Rule, 35 IAC 105

Revised Rule, 35 IAC 252

PSD Factsheet

Illinois Pollution Control Board

Public Act 099-0463

Questions about the Proposed Rule and Illinois EPA Contact

Brad Frost

Illinois EPA

Office of Community Relations

217/782-7027

EPA.PSDRulemaking@illinois.gov

Schnepp, Jason

From: Schnepp, Jason
Sent: Wednesday, November 01, 2017 8:38 AM
To: Ogulei, David
Subject: Accepted: [External] Discuss IEPA's PSD Draft Rule

Carter, Sally

From: Carter, Sally
Sent: Wednesday, November 1, 2017 8:05 AM
To: Ogulei, David; Romaine, Chris
Cc: Damico, Genevieve; Portanova, Sam; Pilapil, Ray; Schnepf, Jason
Subject: RE: FW: Public Outreach for PSD Draft Rule

2 pm on November 14th work for us. Thanks.

From: Ogulei, David [mailto:Ogulei.David@epa.gov]
Sent: Tuesday, October 31, 2017 10:21 AM
To: Romaine, Chris <Chris.Romaine@Illinois.gov>; Carter, Sally <Sally.Carter@Illinois.gov>
Cc: Damico, Genevieve <damico.genevieve@epa.gov>; Portanova, Sam <portanova.sam@epa.gov>; Pilapil, Ray <Ray.Pilapil@Illinois.gov>
Subject: [External] RE: FW: Public Outreach for PSD Draft Rule

As we discussed last week, we would like to schedule a call for Tuesday November 14 to discuss the draft PSD rule and obtain clarification on any questions we might have. We are available anytime on Tuesday afternoon, 11/14. Is there a specific time in the afternoon of 11/14 that works for you?

David

-----Original Message-----

From: Romaine, Chris [mailto:Chris.Romaine@Illinois.gov]
Sent: Monday, October 23, 2017 10:04 AM
To: Ogulei, David <Ogulei.David@epa.gov>
Subject: RE: [External] FW: Public Outreach for PSD Draft

As of today, there have been no substantive comments from the public.

We can discuss further tomorrow.

-----Original Message-----

From: Ogulei, David [mailto:Ogulei.David@epa.gov]
Sent: Thursday, October 19, 2017 5:33 PM
To: Romaine, Chris <Chris.Romaine@Illinois.gov>
Cc: Damico, Genevieve <damico.genevieve@epa.gov>; Pilapil, Ray <Ray.Pilapil@Illinois.gov>
Subject: [External] FW: Public Outreach for PSD Draft

Chris,

Can you give us an update on the status of this package before or during Tuesday's call? As we've indicated in the past, we look forward to working with IEPA as early in the process as possible so we can discuss and potentially resolve any EPA concerns before a formal submittal is filed.

Thanks,
David

-----Original Message-----

From: Pilapil, Ray [mailto:Ray.Pilapil@Illinois.gov]

Sent: Wednesday, September 27, 2017 10:36 AM

To: Damico, Genevieve <damico.genevieve@epa.gov>

Cc: Ogulei, David <Ogulei.David@epa.gov>; Marcus, Danny <marcus.danny@epa.gov>

Subject: Public Outreach for PSD Draft

Genevieve,

Just a quick note to let you know we are planning on starting public outreach on a draft PSD rulemaking package around 09/29/17. If you would like to discuss further, please let me know.

Thanks.

Ray

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

Carter, Sally

From: Pilapil, Ray
Sent: Wednesday, September 27, 2017 2:48 PM
To: Armitage, Julie; Carter, Sally
Subject: FW: [External] RE: Public Outreach for PSD Draft

FYI

-----Original Message-----

From: Damico, Genevieve [mailto:damico.genevieve@epa.gov]
Sent: Wednesday, September 27, 2017 2:20 PM
To: Pilapil, Ray <Ray.Pilapil@Illinois.gov>
Cc: Ogulei, David <Ogulei.David@epa.gov>; Marcus, Danny <marcus.danny@epa.gov>
Subject: [External] RE: Public Outreach for PSD Draft

Thanks for the heads up. We are looking forward to helping you get a SIP-approved PSD program.

-----Original Message-----

From: Pilapil, Ray [mailto:Ray.Pilapil@Illinois.gov]
Sent: Wednesday, September 27, 2017 10:36 AM
To: Damico, Genevieve <damico.genevieve@epa.gov>
Cc: Ogulei, David <Ogulei.David@epa.gov>; Marcus, Danny <marcus.danny@epa.gov>
Subject: Public Outreach for PSD Draft

Genevieve,

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Thanks.

Ray

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Carter, Sally

From: Bloomberg, David E.
Sent: Wednesday, September 27, 2017 9:54 AM
To: Douglas Aburano
Cc: Carter, Sally
Subject: PSD draft going to outreach

Doug,

Wanted to let you know that Illinois EPA will soon be sending out a draft PSD rulemaking package for outreach. I hadn't really mentioned this before because it is being led by our Permits people and AQPS hasn't really been involved. However, I wanted to make sure you are in the loop.

Our Permits people will be contacting Genvieve's group separately, but let me know if you want a draft to review. I know in the past, your group hasn't been highly involved in permit-related rules.

Thanks.

-- David

EXHIBIT B



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

P.O. Box 19506, SPRINGFIELD, ILLINOIS 62794-9506

RENEE CIPRIANO, DIRECTOR

EPA-DIVISION OF RECORDS MANAGEMENT
RELEASABLE

217/782-2113

CONSTRUCTION PERMIT - PSD APPROVAL
NSPS-NESHAP EMISSION UNITS

MAR 30 2012

PERMITTEEPrairie State Generating Company, LLC
Attn: Dianna Tickner, President
701 Market Street, Suite 781
St. Louis, Missouri 63010

REVIEWER RDH

Application No.: 01100065I.D. No.: 189808AABApplicant's Designation:Date Received: October 19, 2001Subject: Electricity Generation FacilityDate Issued: April 28, 2005Location: Southwest Corner of Marigold Road, Off of Washington County Highway
12, Approximately 5 Miles East Northeast of Marissa

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission sources and air pollution control equipment consisting of a mine-mouth coal-fired power plant with two power boilers, cooling towers, fuel handling and storage, limestone handling and storage, ash handling and storage, auxiliary gas-fired boiler, and ancillary operations, as described in the above referenced application. This Permit is granted based upon and subject to the findings and conditions that follow.

In conjunction with this permit, approval is given with respect to the federal regulations for Prevention of Significant Deterioration of Air Quality (PSD) for the plant, as described in the application, in that the Illinois Environmental Protection Agency (Illinois EPA) finds that the application fulfills all applicable requirements of 40 CFR 52.21. This approval is issued pursuant to the federal Clean Air Act, the federal regulations promulgated thereunder at 40 CFR 52.21 for the PSD program, and a Delegation of Authority agreement between the United States Environmental Protection Agency (USEPA) and the Illinois EPA for the administration of the PSD Program. This approval becomes effective on June 8, 2005, as authorized by the provisions of 40 CFR 124.15, unless a petition for review is filed in accordance with provisions of 40 CFR 124.19. For purposes of any appeal petition that may be filed, the 30 day period for requesting review begins on May 9, 2005. This approval is based upon the findings that follow. This approval is subject to the following conditions. This approval is also subject to the general requirement that the plant be developed and operated consistent with the specifications and data included in the application and any significant departure from the terms expressed in the application, if not otherwise authorized by this permit, must receive prior written authorization from the Illinois EPA.

If you have any questions on this permit, please call Shashi Shah at 217/782-2113 (TDD 217/782-9143).

Donald E. Sutton, P.E.
Manager, Permit Section
Division of Air Pollution Control

DES:SRS:jar

CPR 4/20/05 [Signature]

cc: Region 3
USEPA Region V**COPY**
Original Signed by
Donald E. Sutton, P.E.

ROD R. BLAGOJEVICH, GOVERNOR

PRINTED ON RECYCLED PAPER

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INTRODUCTION: FINDINGS

- 1a. Prairie State Generating Company, LLC (Prairie State) has requested a permit for a mine-mouth coal fired power plant with a nominal capacity of 1500 MW_{net}. The proposed plant would have two identical pulverized coal boilers equipped with low-NO_x burners, selective catalytic reduction (SCR), electrostatic precipitator (ESP), wet flue gas desulfurization (WFGD) and wet electrostatic precipitator (WESP). Other emission units would include: fuel handling and storage, ash handling and storage, limestone handling and storage, cooling towers, and an auxiliary boiler at the power plant facility; coal handling operations at the new underground coal mine; and ancillary operations.
- b. The boilers, which each would have a maximum rated capacity of about 7,450 million Btu/hour, would be fired on coal as their primary fuel, with natural gas used as the startup fuel. The boilers would be designed for raw Illinois No. 6 coal from a new underground mine to be developed adjacent to the boiler complex. The design coal supply would nominally have 4.0 percent sulfur by weight and 8,780 Btu per pound as received at the power plant facility, following routine preparation to separate rock from the coal fuel. As part of its review of the application, the Illinois EPA considered requiring washing of this coal as a means to specifically reduce its sulfur content. The Illinois EPA determined that for mine-mouth coal, any benefits of coal washing would be outweighed by the adverse environmental, energy and economic impacts associated with coal washing and storage of associated coal waste. To address potential interruptions in the mine-mouth coal supply and facilitate reliable operation of the power plant, the boilers would also be allowed to use Illinois No. 6 coal and Illinois No. 5 coal (which is similar to the mine-mouth coal) from other mines. Because the source(s) of this coal are not specified, e.g., the coal could be obtained from mines that already have a washing facility and that are some distance from the plant, the analyses and evaluation performed for coal washing at the proposed plant are not applicable for the use of such non-mine-mouth coals. Accordingly, coal for the boilers, other than mine-mouth coal, is required to be washed.
2. The plant would be located in rural Washington County. The site is in an area that is currently designated attainment for all criteria pollutants.
3. The proposed plant is a major source under the PSD rules. This is because the boilers would have potential annual emissions of sulfur dioxide (SO₂), nitrogen oxides (NO_x), particulate matter (PM) as PM₁₀, carbon monoxide (CO), volatile organic material (VOM) and sulfuric acid mist, that are in excess of 100 tons. (Refer to Table I for the potential emissions of the boilers.)
4. The proposed plant is a major source for emissions of hazardous air pollutants (HAPs). The potential emissions from the plant will be greater than 10 tons of an individual HAP, i.e., hydrogen chloride and hydrogen fluoride, and more than 25 tons in aggregate for a combination of HAPs. Therefore, the plant is being subjected to review under Section 112(g) of the federal Clean Air Act.

- 5a. After reviewing the materials submitted by Prairie State, the Illinois EPA has determined that the project will (i) comply with applicable Pollution Control Board (Board) emission standards, (ii) comply with applicable federal emission standards, (iii) utilize Best Available Control Technology (BACT) on emissions as required by PSD, and (iv) utilize Maximum Achievable Control Technology (MACT) for emissions of HAPs as required by Section 112(g) of the Clean Air Act.
- b. The determinations of BACT and MACT made by the Illinois EPA for the proposed plant are the control technology determinations contained in the permit conditions for specific emission units.
- c. Because USEPA has not adopted MACT standards for utility boilers at power plants pursuant to Section 112 of the Clean Air Act, this permit contains a case-by-case determination of MACT pursuant to Section 112(g) of the Clean Air Act. This addresses the possibility that such standards are ultimately required but are not yet adopted by USEPA or are not effective when the plant would begin to operate, so that MACT must be established pursuant to Section 112(g) of the Clean Air Act. For this purpose, limits related to HAP emissions constitute MACT. As limits are not present for specific HAPs, the MACT determination relies upon the limits established for other pollutants to also restrict emissions of HAPs for which individual limits are not set.
- 6a. The air quality analysis submitted by Prairie State and reviewed by the Illinois EPA shows that the proposed project will not cause or contribute to violations of the National Ambient Air Quality Standard (NAAQS) for NO₂, SO₂, PM/PM₁₀, and CO. The air quality analysis shows compliance with the Class II allowable increment levels established under the PSD regulations.
- b. Prairie State has also evaluated the impact of the proposed plant on air quality and visibility in the Wilderness Area at the Mingo Wildlife Refuge, which is located approximately 140 kilometers southwest of the proposed plant. This analysis shows that the plant will not violate the Class I air quality increments applicable in the Mingo Wilderness Area. The Illinois EPA also determined based on the visibility assessment submitted by Prairie State that the proposed plant would not have an adverse impact on visibility values in the Mingo Class I Area.
- i. Under the PSD rules, the Illinois EPA must determine whether emissions from this plant will have an adverse impact on visibility and other air quality related values at Class I areas. Prairie State submitted a visibility assessment using the guidance prepared by the *Federal Land Managers' Air Quality Related Values Work Group (FLAG)*, with adjustments that the Illinois EPA determined were appropriate for the Mingo Area. This assessment showed when taking into account weather phenomena (rain, snow, fog, drizzle, etc.) on natural background light extinction and visitor use, the plant would not have an adverse impact on visibility. Only one day out of the three years of meteorological data used in the modeling predicted a change in the extinction

coefficient of greater than 10%, i.e., a maximum 12.1% change. Copies of these analyses were provided to the Federal Land Manager for the Mingo Area, i.e., the United States Fish and Wildlife Service (USFWS) and the USFWS subsequently submitted comments indicating that it believed that the project would have an adverse impact on air quality related values at the Mingo Area.

- ii. Having considered the USFWS comments and other information in the record, Illinois EPA finds that this project will not have an adverse impact on the Mingo Area. While the Illinois EPA considered the FLAG guidance, the Illinois EPA recognized that the FLAG guidance must be applied to include the effects of weather phenomena on natural background light extinction and the effect of visitor use of the Class I area. This finding is consistent with the FLAG guidance, which notes that adverse impact on visibility is defined in federal visibility protection regulations (40 CFR 51.300, et seq., Section 52.27) as "visibility impairment, which interferes with the management, protection, preservation or enjoyment of the visitor's visual experience of the federal Class I area. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairment, and how these factors correlate with: (1) times of visitor use of the federal Class I area, and (2) the frequency and timing of natural conditions that reduce visibility."
- iii. This permit contains requirements for the coal-fired boilers that were not present in the draft permit that reduce the emissions and air quality impacts of the plant, which were not considered as part of the USFWS' original evaluation. These requirements include an additional limit for the SO₂ emissions in terms of control efficiency and a more stringent limit for NO_x emissions (Conditions 2.1.2(b)(ii)(B) and (b)(iii)). This permit also includes certain requirements proposed by Prairie State specifically to ameliorate any potential impact on air quality related values at the Mingo Area (Conditions 1.1.9, 2.1.7(a)(ii), and 2.1.7(b)(ii)). Most notably, Prairie State will retire 25 percent more SO₂ allowances than required to comply with the Acid Rain program, in proportion to actual emissions, until (1) implementation of additional cap and trade federal regulation or legislation (such as the Clean Air Interstate Rule); or (2) other new federal or state regulations limiting SO₂ emissions from power plants are adopted and take effect. This commitment goes significantly beyond the requirements of the federal Acid Rain program, which already requires Prairie State to obtain and retire SO₂ allowances on a one-for-one basis for actual emissions of SO₂ and acts to prevent any net increase in SO₂ emissions to the atmosphere as a result of the operation of the plant. Nor did the USFWS original evaluation include a consideration of other related developments that affect emissions of Illinois' coal-fired power plants, i.e., the development of a Consent Decree to specifically address emissions of Dynegy's plants, including the Baldwin plant, and the USEPA's actual adoption of the Clean Air Interstate Rule.

- c. The Illinois EPA has evaluated the impact of the proposed plant on ozone air quality. The Illinois EPA's evaluation concludes that the plant will not interfere with improvements in ozone air quality and attainment of the ozone standard in the St. Louis area.
7. The Illinois EPA has determined that the proposed plant complies with all applicable Board Air Pollution Control Regulations; the federal rules for PSD, 40 CFR 52.21; applicable federal New Source Performance Standards (NSPS), 40 CFR 60; and Section 112(g) of the Clean Air Act and applicable federal regulations thereunder, National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart B.
8. In conjunction with the issuance of this permit, the Illinois EPA has also issued an Acid Rain permit for the proposed coal boilers, to address requirements of the federal Acid Rain program. These boilers would be affected units under the Acid Rain Deposition Control Program pursuant to Title IV of the Clean Air Act. As affected units under the Acid Rain Program, Prairie State must hold SO₂ allowances each year for the actual emissions of SO₂ from the boilers. The boilers are also subject to emissions monitoring requirements pursuant to 40 CFR Part 75. As the Acid Rain permit relates to the Acid Rain Program, it is not considered part of the PSD approval.
9. In conjunction with the issuance of this permit, the Illinois EPA is also issuing a Budget Permit for the proposed coal boilers, to address requirements of the NO_x Trading Program. As the Budget Permit relates to the NO_x Trading Program, it is not considered part of the PSD approval.
10. A copy of the application, the project summary prepared by the Illinois EPA, a draft of this permit, and a draft of the Acid Rain and Budget permits were placed in a nearby public repository, and the public was given notice and an opportunity to examine this material and to participate in a public hearing and to submit comments on these matters.

INTRODUCTION: IDENTIFICATION OF SIGNIFICANT EMISSIONS UNITS

Unit Number	Description	Emission Control Measures
1	Boiler 1 - Pulverized Coal Boiler	Good Combustion Practices, Low NO _x Burners, Selective Catalytic Reduction, Electrostatic Precipitator, Wet Flue Gas Desulfurization (Scrubber), and Wet Electrostatic Precipitator
	Boiler 2 - Pulverized Coal Boiler	Good Combustion Practices, Low NO _x Burners, Selective Catalytic Reduction, Electrostatic Precipitator, Wet Flue Gas Desulfurization (Scrubber), and Wet Electrostatic Precipitator
2	Fuel and Other Bulk Material Handling, Processing and Storage Operations	Baghouses and Dust Control Measures (application of water or dust suppressant, enclosures or compaction, and filtration)
3	Cooling Towers	High-Efficiency Drift Eliminators
4	Auxiliary Boiler - Natural Gas Fired Boiler	Low-NO _x Burners, Limited Operations, Proper Combustion, Operation and Maintenance
5	Roadways and Other Sources of Fugitive Dust	Paving and Dust Control Measures (application of water or dust suppressions and dust collection)

SECTION 1: SOURCE-WIDE PERMIT CONDITIONS

CONDITION 1.1: EFFECT OF PERMIT

- a. This permit does not relieve the Permittee of the responsibility to comply with all local, state and federal regulations that are part of the applicable Illinois' State Implementation Plan, as well as all other applicable federal, state and local requirements.
- b. In particular, this permit does not relieve the Permittee from the responsibility to carry out practices during the construction and operation of the plant, such as application of water or dust suppressant sprays to unpaved traffic areas, as necessary to minimize fugitive dust and prevent an air pollution nuisance from fugitive dust, as prohibited by 35 IAC 201.141.

CONDITION 1.2: VALIDITY OF PERMIT AND COMMENCEMENT OF CONSTRUCTION

- a. This permit shall become invalid as applied to the plant and each boiler at the plant if construction is not commenced within 18 months of the PSD approval becoming effective, if construction of a boiler is discontinued for a period of 18 months or more, or if construction of a boiler is not completed within a reasonable period of time. The Illinois EPA may extend the 18-month period upon a satisfactory showing that an extension is justified. This condition supersedes Standard Condition 1 of the permit. (See Attachment 2)
- b. For purposes of the above provisions, the definitions of "construction" and "commence" at 40 CFR 52.21 (b) (8) and (9) shall apply, which requires that a source must enter into a binding agreement for on-site construction or begin actual on-site construction. (See also the definition of "begin actual construction," 40 CFR 52.21 (b) (11)).

CONDITION 1.3: FUEL SUPPLY

- a. The power plant shall be developed and operate as a mine-mouth plant.

Note: Acceptance of any coal by rail or truck would require a separate state construction permit, as this permit does not address receiving of coal by rail or truck. The proposed use of unwashed coal delivered by rail or truck by the plant would require approval under the PSD rules. As part of such approval, the determination of BACT for the coal boilers would be subject to review and possible revision as needed to address the new source(s) of coal and requirements for coal washing as related to control of SO₂ emissions.

- i. As a mine-mouth facility, the plant shall use coal delivered by conveyor belt directly from the mining facility or facilities in the two coal-fired boilers, except during extended interruptions in the mine-mouth coal supply.

ii. During an extended interruption in the mine-mouth coal supply, the plant may use washed Illinois No. 5 and No. 6 coal from off-site, as further provided below:

- A. For an incident to be considered an extended interruption in the coal supply to the boilers, the interruption must be caused by events or circumstances that could not have been reasonably prevented by the Permittee, its contractors, or any entity controlled by the Permittee, and the interruption in the coal supply must be of longer duration than the interruptions that routinely occur in the operation of mining facilities (which the Permittee can address by maintaining a reserve supply of coal at the plant).
- B. To continue to qualify for the exception provided for extended interruptions in the mine-mouth coal supply, the Permittee must be undertaking a program to restore the coal supply that has experienced the interruption, in a reasonable period of time that is consistent with the nature of the efforts needed to restore such coal supply. In the event that only a partial interruption occurs or the operation of the mining facility is partially restored, the exception for an extended interruption in the coal supply only applies to the portion of the coal supply that is affected.
- C. The Permittee shall notify the Illinois EPA prior to using coal from off-site. This notification shall include a detailed description of the nature of the anticipated interruption in the mine-mouth coal supply and document why it qualifies as an extended interruption. This notification shall be submitted 15 days before beginning to use off-site coal or otherwise as soon as it is practicable to do so. Thereafter, the Permittee shall submit periodic progress reports on a schedule as specified by the Illinois EPA.

CONDITION 1.4: GENERAL PROVISIONS FOR A MAJOR SOURCE OF HAZARDOUS AIR POLLUTANTS (HAPS)

- a. As the plant is a new major source of HAPs for purposes of Section 112 of the Clean Air Act, the Permittee shall comply with all applicable requirements contained in 40 CFR Part 63, Subpart A. In particular, for the various HAP emission units at the source, the Permittee shall comply with the following applicable requirements of 40 CFR 63 Subpart A, related to startup, shutdown, and malfunction, as defined at 40 CFR 63.2:
 - i. The Permittee shall at all times, including periods of startup, shutdown, and malfunction as defined at 40 CFR 63.2, operate and maintain emission units at the source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions to the levels required by the relevant standards, i.e., meet the emission standard(s) or comply with the applicable Startup, Shutdown, and Malfunction Plan (Plan), as

required below. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Illinois EPA and USEPA, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the Plan), review of operation and maintenance records, and inspection of the unit. [40 CFR 63.6(e)(1)(i)]

ii. The Permittee shall correct malfunctions as soon as practicable after their occurrence in accordance with the applicable Plan. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, the Permittee shall comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices. [40 CFR 63.6(e)(1)(ii)]

iii. These operation and maintenance requirements, which are established pursuant to Section 112 of the Clean Air Act, are enforceable independent of applicable emissions limitations and other applicable requirements. [40 CFR 63.6(e)(1)(iii)]

b. The Permittee shall develop, implement, and maintain written Startup, Shutdown, and Malfunction Plans (Plans) that describe, in detail, procedures for operating and maintaining the various emission units at the plant during periods of startup, shutdown, and malfunction and a program of corrective action for a malfunctioning process, and air pollution control and monitoring equipment used to comply with the relevant emission standards. These Plans shall be developed to satisfy the purposes set forth in 40 CFR 63.6(e)(3)(i)(A), (B) and (C). The Permittee shall develop its initial Plans prior to the initial startup of an emission unit(s). [40 CFR 63.6(e)(3)(i)]

i. During periods of startup, shutdown, and malfunction of an emission unit, the Permittee shall operate and maintain such unit, including associated air pollution control and monitoring equipment, in accordance with the procedures specified in the applicable Plan required above. [40 CFR 63.6(e)(3)(ii)]

ii. When actions taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the applicable Plan, the Permittee shall keep records for that event which demonstrate that the procedures specified in the Plan were followed. In addition, the Permittee shall keep records of these events as specified in 40 CFR 63.10(b), including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the Permittee shall confirm in the periodic compliance report that actions taken during periods of startup, shutdown, and malfunction were consistent with the applicable Plan, as required by 40 CFR 63.10(d)(5). [40 CFR 63.6(e)(3)(iii)]

- iii. If an action taken by the Permittee during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) of an emission unit is not consistent with the procedures specified in the applicable Plan, and the emission unit exceeds a relevant emission standard, then the Permittee must record the actions taken for that event and must promptly report such actions as specified by 40 CFR 63.6(d)(5), unless otherwise specified elsewhere in this permit or in the CAAPP Permit to be issued for the plant. [40 CFR 63.6(e)(3)(iv)]
- iv. The Permittee shall make changes to the Plan for an emission unit if required by the Illinois EPA or USEPA, as provided for by 40 CFR 63.6(e)(3)(vii), or as otherwise required by 40 CFR 63.6(e)(viii). [40 CFR 63.6(e)(3)(vii) and (viii)]
- v. These Plans are records required by this permit, which the Permittee must retain in accordance with the general requirements for retention and availability of records (See Condition 4.4). In addition, when the Permittee revises a Plan, the Permittee must also retain and make available the previous (i.e., superseded) version of the Plan for a period of at least 5 years after such revision. [40 CFR 63.6(e)(v) and 40 CFR 63.10(b)(1)]

Note: See also Condition 2.1.6 for the coal boilers.

CONDITION 1.5: ANCILLARY EQUIPMENT, INCLUDING THE TWO DIESEL ENGINES

- a. Ancillary equipment, including the two diesel engines, shall be operated in accordance with good air pollution control practices to minimize emissions.
- b.
 - i. The diesel engines shall be used as emergency engines, as defined at 35 IAC 211.1920.
 - ii. The power output of each diesel engine shall be no more than 1,500 horsepower, as necessary to qualify as an emergency or standby unit as defined by 35 IAC 211.1920.
 - iii. Operation of each diesel engine shall not exceed 340 hours per year; provided, however, that the Illinois EPA may authorize temporary operation of each diesel engine in excess of 340 hours per year to address extraordinary circumstances that require operation of the engines, by issuance of a separate State construction permit addressing such circumstances.
 - iv. The fuel fired in the diesel engines shall be ultra-low sulfur (ULS) diesel fuel or other alternative ultra-low sulfur fuel oil containing no more than 15 ppm sulfur (e.g., bio-diesel).

Note: These requirements for the fuel fired in the engines constitute the determination of Best Available Control Technology (BACT) for the engines, as required under the PSD rules.

CONDITION 1.6: AUTHORIZATION TO OPERATE EMISSION UNITS

- a.
 - i. Under this permit, each coal boiler and associated equipment may be operated for a period that ends 180 days after the boiler first sends electricity to the grid to allow for equipment shakedown and required emissions testing. This period may be extended by Illinois EPA upon request of the Permittee if additional time is needed to complete shakedown or perform emission testing. This condition supersedes Standard Condition 6. (See Attachment 2)
 - ii. Upon successful completion of emission testing of a pulverized coal boiler demonstrating compliance with applicable limitations, the Permittee may continue to operate the boiler and associated equipment as allowed by Section 39.5(5) of the Environmental Protection Act.
- b.
 - i. The remainder of the plant, excluding the coal boilers, may be operated under this construction permit for a period of 365 days after initial startup of a pulverized coal boiler. This period of time may be extended by the Illinois EPA for up to an additional 365 days upon written request by the Permittee as needed to reasonably accommodate unforeseen difficulties experienced during shakedown of the plant. This condition supersedes Standard Condition 6. (See Attachment 2)
 - ii. Upon successful completion of emission testing of a pulverized coal boiler demonstrating compliance with applicable limitations, the Permittee may continue to operate the remainder of the plant as allowed by Section 39.5(5) of the Environmental Protection Act.
- c. For the coal boilers and other emission units that are subject to federal New Source Performance Standards (NSPS), the Permittee shall fulfill applicable notification requirements of the NSPS, 40 CFR 60.7(a), including:
 - i. Written notification of commencement of construction no later than 30 days after such date (40 CFR 60.7(a)(1)); and
 - ii. Written notification of the actual date of initial startup within 15 days after such date (40 CFR 60.7(a)(3)).

CONDITION 1.7: POST-CONSTRUCTION MONITORING

- a. The Permittee shall construct, operate and maintain an ambient air monitoring station, as follows, at an appropriate location in southwestern Illinois at a site outside the St. Louis metropolitan area to assist the Illinois EPA in evaluating PM_{2.5} air quality in the region and to support evaluation of the impact of sources in southwestern Illinois on air quality and visibility in the Mingo Wilderness Area.
 - i. Monitoring shall be conducted in accordance with written monitoring procedures, in a manner that is consistent with applicable USEPA regulations for ambient air quality monitoring and collection of meteorological data.

- ii. Ambient monitoring shall be conducted for speciated PM2.5 and ammonia. Meteorological data, i.e., temperature, wind direction and speed, humidity, and solar radiation, shall also be collected at the monitoring station.
 - iii. The Illinois EPA shall be consulted on the development of this monitoring station. The site for the station and the monitoring and meteorological instruments shall be subject to review and approval by the Illinois EPA prior to entering into site or purchase agreements. The procedures for monitoring shall be subject to review and comment by the Illinois EPA prior to initiation of ambient monitoring.
 - iv. The Permittee shall provide the Illinois EPA with reasonable access to the monitoring station, including allowing the Illinois EPA to conduct quality assurance audits of instruments. All logs and other operating records kept in conjunction with monitoring shall be considered records required by this permit, except that these records may be kept at the monitoring station until such time as the station is closed, when these records shall be transferred to the plant.
 - v. All air quality and meteorological data collected at the station, along with quality assurance data, shall be supplied to the Illinois EPA, which may make all such data publicly available under the Freedom of Information Act.
 - vi. Monitoring shall begin at least one year before the scheduled startup of the coal boilers, to assure that the monitoring station is fully operational when the plant begins operation and to obtain base air quality data.
 - vii. Monitoring shall continue for at least three full calendar years following the completion of the shakedown of the coal boilers.
- b. As an alternative to conducting monitoring as set forth above, the Permittee may assist the Illinois EPA in conducting comparable monitoring in the southwestern Illinois region, by supplying equipment, developing monitoring sites or providing other support for the Illinois EPA's monitoring program, while the Illinois EPA or other parties assume responsibility for the day-to-day operation of the monitoring stations. For this purpose, monitoring may be conducted at a station in southwestern Illinois located in the St. Louis metropolitan area, as well as at stations located outside the metropolitan area. If the Permittee elects this alternative, the level of support provided by the Permittee shall be comparable to the total expense that the Permittee would have experienced had it conducted the above ambient monitoring.
- c. These requirements for ambient monitoring may be relaxed in the CAAPP Permit issued for the plant if the Illinois EPA determines that sufficient air quality data has been collected to satisfy the purposes for this monitoring.

CONDITION 1.8: RISK MANAGEMENT PLAN

Should this source be subject to the Chemical Accident Prevention Provisions in 40 CFR Part 68, then the Permittee shall submit:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all applicable requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan.

Note: This condition is imposed in this permit pursuant to 40 CFR 68.215(a).

CONDITION 1.9: SUPPLEMENTAL REQUIREMENTS FOR SO₂ ALLOWANCES

The Permittee shall retire additional SO₂ allowances under the federal Acid Rain Program (See Condition 2.1.5(a), Condition 3.1, and Attachment 3) above those otherwise required by this program in an amount equal to 25 percent of the actual SO₂ emissions from affected units (the coal-fired boilers) until such time as either: (1) An additional federal "cap and trade" control program is adopted and in effect covering SO₂ emissions from coal-fired power plants (such as the Clean Air Interstate Rule), or (2) Other federal or state program is adopted and in effect further controlling SO₂ emissions from power plants on a regional basis, whichever occurs first.

Note: For example, in 2008 when the annual SO₂ emissions from the coal-fired boilers are limited to 10,679 tons, this condition could result in the retirement of up to 2,670 additional SO₂ allowances ($0.25 \times 10,679 \text{ tons/year} = 2,669.8$). The actual amount of additional allowances retired would be determined from the actual annual SO₂ emissions of the boilers. This condition reflects a commitment made by the Permittee to the United States Fish and Wildlife Service (USFWS) in response to concerns expressed by the USFWS about the impact of the plant on Air Quality Related Values in the Wilderness Area in the Mingo Wildlife Refuge in southeastern Missouri. (See also Conditions 2.1.7(a)(ii) and (b)(ii).)

SECTION 2: UNIT-SPECIFIC CONDITIONS FOR PARTICULAR EMISSION UNITS

CONDITION 2.1: UNIT-SPECIFIC CONDITIONS FOR THE BOILERS

2.1.1 Emission Unit Description

The affected units for the purpose of these specific permit conditions are two pulverized coal boilers with individual air pollution control trains. The boilers would also have the capability to burn natural gas, which would be used for startup of the boilers.

2.1.2 Control Technology Determination

- a. Each boiler shall be operated and maintained with the following features to control emissions:

- i. Good combustion practices.
- ii. Low-NO_x burners.
- iii. Selective catalytic reduction (SCR).
- iv. Electrostatic precipitator (ESP).
- v. Wet flue gas desulfurization (WFGD).
- vi. Wet electrostatic precipitator (WESP).

- b. The emissions from each boiler shall not exceed the following limits:

- i. A. PM - 0.015 lb/million Btu.

This limit shall apply as a 3-hour block average, with compliance determined by emission testing for PM (filterable) in accordance with Condition 2.1.8 and from equipment operation. This limit shall not apply during startup, shutdown and malfunction as addressed by Condition 2.1.2(e).

- B. PM₁₀ - 0.035 lb/million Btu.

This limit shall apply as a 3-hour block average, with compliance determined by emission testing for PM (filterable and condensable) in accordance with Condition 2.1.8 and from equipment operation. This limit shall not apply during startup, shutdown and malfunction as addressed by Condition 2.1.2(e). A lower limit (as low as 0.018 lb/million Btu) may be set pursuant to Condition 2.1.17, which requires reevaluation of the above limit based upon actual PM₁₀ emissions of the affected boilers.

ii. A. SO₂ - 0.182 lb/million Btu.

This limit shall apply as a 30 day rolling average, with compliance determined using the compliance procedures set forth in the NSPS, 40 CFR 60.48a. In lieu of the compliance procedures of the NSPS, for a 30 day period that includes a startup of an affected boiler, compliance may be determined on a mass-basis by calculating the average emission rate in lb/million Btu from the total emissions of SO₂ and the total heat input to the boiler during the period, as determined under the methodology of the Acid Rain program.

B. SO₂ -98 percent control (2 percent of the potential combustion concentration of the coal supply for the boilers).

This limit shall take effect 18 months after the initial startup of the boiler. This limit shall apply as a 12 month rolling average with compliance determined based on the actual SO₂ emissions of the boiler determined using the procedures set forth under the Acid Rain program and its theoretical emissions of SO₂, that would result from combustion of coal without emissions control systems, calculated as the product of the average SO₂ input rate from "as fired" fuel analyses, determined in accordance with 40 CFR 60, Appendix A, Method 19, and 60.48a(b), and the heat input to the boilers, also determined using procedures under the Acid Rain program.

Note: These limits for SO₂ emissions apply to all operations of a boiler, that is, emissions of SO₂ during periods of startup, shutdown and malfunction are not excluded from the determination of compliance.

iii. NO_x - 0.07 lb/million Btu.

This limit shall apply as a 30 day rolling average using the compliance procedures set forth in the NSPS, 40 CFR 60.48a. In lieu of the compliance procedures of the NSPS, for a 30 day period that includes a startup or shutdown of an affected boiler compliance may be determined on a mass-basis by calculating the average emission rate in lb/million Btu from the total emissions of NO_x and the total heat input to the boiler during the period, as determined under the methodology of the NO_x Trading program.

Note: This limit for NO_x emissions applies to all operations of a boiler, that is, emissions of NO_x during startup, shutdown and malfunction are not excluded from the determination of compliance.

- iv. A. CO - 0.12 lb/million Btu.

This limit shall apply as a 24-hour block average basis, with continuous monitoring conducted in accordance with Condition 2.1.9. This limit shall not apply during periods of startup and shutdown as addressed below.

- B. CO - 893 lb/hr* for startup and shutdown.

This limit shall apply as a 24-hour block average basis with continuous monitoring conducted in accordance with Condition 2.1.9. This limit shall apply during periods of startup and shutdown as also addressed by Condition 2.1.2(e). (For a startup event, the 24-hour period shall begin with the startup of the boiler, i.e., initial firing of fuel. For a shutdown event, the 24-hour period shall end with the shutdown of the boiler, i.e., cessation of fuel flow to the boiler.)

* This value is the product of the rated capacity of the boiler in million Btu/hour and the generally applicable BACT limit for CO, 0.12 lb/million Btu.

- v. VOM - 0.004 lb/million Btu.

This limit shall apply as a 3-hour block average, with compliance determined by emission testing in accordance with Condition 2.1.8 and equipment operation. This limit shall not apply during startup, shutdown and malfunction as addressed by Condition 2.1.2(e).

- vi. Sulfuric Acid Mist - 0.005 lb/million Btu.

This limit shall apply as a 3-hour block average, with compliance determined by emission testing in accordance with Condition 2.1.8 and equipment operation. This limit shall not apply during startup, shutdown and malfunction as addressed by Condition 2.1.2(e).

- vii. Fluorides - 0.00026 lb/million Btu.

This limit shall apply as a 3-hour block average, with compliance determined by emission testing in accordance with Condition 2.1.8 and equipment operation. This limit shall not apply during startup, shutdown and malfunction as addressed by Condition 2.1.2(e).

- c. i. The boilers shall each comply with the requirements for control of mercury emissions from coal-fired utility boilers as established by USEPA pursuant to the Clean Air Act.

- ii. A. If standards for control of mercury emissions from coal-fired utility boilers pursuant to the Clean Air Act have not yet been adopted by USEPA or are not effective, such that the boilers must be subject to a case-by-case determination of MACT pursuant to Section 112(g) of the Clean Air Act, a boiler shall comply with one of the following requirements with respect to emissions of mercury:
- I. A removal efficiency of 95 percent achieved without injection of activated carbon or other similar material specifically used to control emissions of mercury, comparing the emissions and the mercury contained in the coal supply (Permit Option A); or
 - II. Control by injection of powdered activated carbon or other material or a combination of materials specifically for control of mercury emissions to achieve the maximum practicable degree of mercury removal, as established in accordance with Attachment 4 (Permit Option B).
- B. I. Compliance with Permit Option A shall be demonstrated by periodic testing and proper operation of a boiler consistent with other applicable requirements that relate to control of mercury (e.g., requirements applicable to PM and SO₂ emissions) as may be further developed, or revised in the CAAPP Permit issued for the plant. Compliance with Permit Option B shall be demonstrated by proper operation of a boiler and such other practices developed pursuant to Attachment 4 and the applicable State construction permit for the mercury control system. Notwithstanding the above, periods of startup, shutdown and malfunction shall be addressed by the Startup, Shutdown and Malfunction Plan as provided by 40 CFR Part 63, Subpart A. (Refer to Condition 1.4.).
- II. These Permit Options shall take effect 12 months after initial startup of an affected boiler, provided however, the Permittee may, upon written notice to the Illinois EPA, extend this period for up to an additional 12 months if needed for detailed evaluation of mercury emissions from the boilers or physical changes to the boilers related to control of mercury emissions. As part of this notice, the Permittee shall explain why the necessary evaluation of emissions or physical changes to the boilers could not reasonably be completed earlier, identify the activities that it

intends to perform to evaluate emissions or further enhance control for emissions, and specify the particular practices it will use during this period as good air pollution control practices to minimize emissions of mercury. Prior to this, the Permittee shall use good air pollution control practices to minimize emissions of mercury.

Note: In conjunction with either Compliance Option, the Permittee shall also conduct continuous emissions monitoring on a continuous or semi-continuous basis for the emissions of mercury from each boiler. (Refer to Condition 2.1.9-2.)

- d. 1. The boilers shall each comply with the requirements for control of hydrogen chloride emissions established by USEPA pursuant to the Clean Air Act, once applicable regulations are adopted by USEPA.
- ii. A. If such standards are not adopted by USEPA or are not effective, such that the boilers must be subject to a case-by-case determination of MACT pursuant to Section 112(g) of the Clean Air Act, a boiler shall comply with one of the following requirements with respect to emissions of hydrogen chloride:
 - I. An emission rate of 0.0032 lb/million Btu, 3-hour average (Permit Option A); or
 - II. A removal efficiency of 98 percent, 3-hour average, comparing the emissions and the chlorine content of the fuel supply, expressed as equivalent hydrogen chloride (Permit Option B).
- B. Compliance with Permit Options shall be demonstrated by periodic testing and proper operation of a boiler consistent with other applicable requirements that relate to control of SO₂ emissions, as may be further developed or revised in the CAAPP Permit issued for the plant. Notwithstanding the above, periods of startup, shutdown and malfunction shall be addressed by the Startup, Shutdown and Malfunction Plan as provided by 40 CFR Part 63, Subpart A. (Refer to Condition 1.4.)
- C. These Permit Options shall take effect 12 months after initial startup of a boiler. Prior to such date, the Permittee shall use good air pollution control practices to minimize emissions of hydrogen chloride.

- e. The Permittee shall use good air pollution control practices to minimize emissions during startup, shutdown and malfunction of a boiler as further addressed in Condition 2.1.6, including the following:
- i. Use of natural gas during startup to heat the boiler prior to initiating firing of coal;
 - ii. Operation of the boiler and associated air pollution control equipment in accordance with written operating procedures that include Startup, Shutdown and Malfunction Plan(s) (See also Condition 1.4); and
 - iii. Inspection, maintenance and repair of the boiler and associated air pollution control equipment in accordance with written maintenance procedures.

Note: These requirements are applicable for emissions of SO₂, NO_x and CO, for which continuous emissions monitoring is performed and the numerical limits in Condition 2.1.2(b) address emissions during startup, shutdown and malfunction, as well as for emissions of PM, VOM and other pollutants, for which continuous emissions monitoring is not performed and the numerical limits in Condition 2.1.2(b) and (c) do not apply during startup, shutdown and malfunction. For PM, VOM, sulfuric acid mist and fluorides (for which the numerical limits in Condition 2.1.2(b) and (c) do not apply during startup, shutdown and malfunction), the lb/hour limits, 3-hour average, in Condition 2.1.7(a) [Attachment 1: Table 1], which continue to apply during such periods, shall serve as "secondary limits" for purposes of BACT, with compliance determined based on engineering analysis and calculations.

2.1.3 Applicable Federal Emission Standards

- a. i. The boilers are subject to a New Source Performance Standard (NSPS) for Electric Utility Steam Generating Units, 40 CFR 60, Subparts A and Da. The Illinois EPA administers NSPS in Illinois on behalf of the USEPA under a delegation agreement.
- ii. The emissions from each boiler shall not exceed the applicable limits pursuant to the NSPS. In particular, the NO_x emissions from each boiler shall not exceed 1.6 lb/MW-hr gross energy output, based on a 30-day rolling average, pursuant to 40 CFR 60.44a(d).
- iii. The particulate matter emissions from each boiler shall not exceed 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity pursuant to 40 CFR 60.42a(b).

- b. At all times, the Permittee shall maintain and operate each boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions, pursuant to 40 CFR 60.11(d).

2.1.4 Applicable State Emission Standards

Each boiler is subject to the following state emission standards.

- a. Opacity - 35 IAC 212.122 (20 percent opacity)
- b. Particulate matter - 35 IAC 212.201 (0.1 lb/million Btu)*
- c. Sulfur dioxide - 35 IAC 214.121 (1.2 lb/million Btu)*
- d. Carbon monoxide - 35 IAC 216.121 (200 ppm, @ 50 % excess air)*
- e. Nitrogen oxides - 35 IAC 217.121 (0.7 lb/million Btu)*

* This standard is not as stringent as the requirement in Condition 2.1.2.

2.1.5. Applicability of Other Regulations

- a. Each boiler is an affected unit under the Acid Rain Deposition Control Program pursuant to Title IV of the Clean Air Act and is subject to certain control requirements and emissions monitoring, requirements pursuant to 40 CFR Parts 72, 73 and 75. (See also Condition 3.1 and Attachment 3)
- b. The boilers will qualify as Electrical Generating Units (EGU) for purposes of 35 IAC Part 217, Subpart W, the NO_x Trading Program for Electrical Generating Units. As EGU, the Permittee will have to hold NO_x allowances for the NO_x emissions of the boilers during each seasonal control period. (See also Condition 3.2)
- c. For particulate matter, the boilers are pollutant-specific emissions units that will be subject to 40 CFR Part 64, Compliance Assurance Monitoring for Major Stationary Sources. As such, the application for Clean Air Act Permit Program (CAAPP) Permit for the source must include a Compliance Assurance Monitoring (CAM) plan for the boilers.

2.1.6 Operating Requirements

- a. The Permittee shall operate each boiler and associated air pollution control equipment in accordance with good air pollution control practices to minimize emissions, by operating in accordance with detailed written operating procedures as it is safe to do so. These procedures at a minimum shall:
 - i. Address startup, normal operation, shutdown and malfunction events.

- ii. Fulfill applicable requirements of Condition 1.4 for a Startup, Shutdown and Malfunction Plan, including detailed provisions for review of relevant operating parameters of the boiler systems during startup, shutdown and malfunction as necessary to make adjustments and corrections to reduce or eliminate any excess emissions.
- iii. With respect to startup, address readily foreseeable startup scenarios, including so called "hot startups" when the operation of a boiler is only temporarily interrupted, and provide for appropriate review of the operational condition of a boiler prior to initiating startup of the boiler.
- iv. A. With respect to malfunction, identify and address likely malfunction events with specific programs of corrective actions, and provide that upon occurrence of a malfunction that will result in emissions in excess of the applicable limits in Condition 2.1.2(b), 2.1.3 and 2.1.4, the Permittee shall, as soon as practicable, repair the affected equipment, reduce the operating rate of the boiler or remove the boiler from service so that excess emissions cease.

B. Consistent with the above, if the Permittee has maintained and operated a boiler and associated air pollution control equipment so that malfunctions are infrequent, sudden, not caused by poor maintenance or careless operation, and in general are not reasonably preventable, the Permittee shall begin shutdown of the boiler within 90 minutes, unless the malfunction is expected to be repaired within 120 minutes or such shutdown could threaten the stability of the regional electrical power supply. In such case, shutdown of the system shall be undertaken when it is apparent that repair will not be accomplished within 120 minutes or shutdown will not endanger the regional power system. In no case shall shutdown of the boiler be delayed solely for the economic benefit of the Permittee.

Note: If the Permittee determines that the continuous emission monitoring system (CEMS) is inaccurately reporting excess emissions, the boiler may continue to operate provided the Permittee records the information it is relying upon to conclude that the boiler and associated emission control systems are functioning properly and the CEMS is reporting inaccurate data and the Permittee takes prompt action to resolve the accuracy of the CEMS.

- b. The Permittee shall maintain each boiler and associated air pollution control equipment in accordance with good air pollution control practices to assure proper functioning of equipment and minimize malfunctions, including maintaining the boiler in accordance with written procedures developed for this purpose.

- c. The Permittee shall handle the fuel for the boilers in accordance with a written Fuel Management Plan that shall be designed to provide the boilers with a consistent fuel supply that meets relevant criteria needed for proper operation of the boilers and their control systems.
- d. The Permittee shall review its operating and maintenance procedures and its Fuel Management Plan for the boilers as required above on a regular basis and revise them if needed consistent with good air pollution control practices based on actual operating experience and equipment performance. This review shall occur at least annually if not otherwise initiated by occurrence of a startup, shakedown, or malfunction event that is not adequately addressed by the existing plans or a specific request by the Illinois EPA for such review.

2.1.7 Emission Limitations

- a.
 - i. Emissions from the boilers shall not exceed the limits in Attachment 1, Table I. The limits in Table I are generally based upon the emission rates and the maximum firing rate specified in the permit application consistent with the air quality analysis submitted by the Permittee pursuant to PSD.
 - ii. Effective 12 months after completion of the initial performance tests or 24 months after initial startup of the boiler, whichever occurs first, SO₂ emissions from the boiler shall not exceed 2,450 lb/hour, daily average.
 - iii.
 - A. For hourly limitations for which compliance is to be determined on a 24-hour average basis, continuous emission monitoring is required for the pollutant (see Condition 2.1.9). Monitoring data shall be compiled on a calendar day basis to determine compliance, except for NO_x and CO for a calendar day in which a startup or shutdown of a boiler occurred as addressed by Condition 2.1.6(a) for which monitoring data shall be compiled for the 24-hour period following or preceding such event, as appropriate.
 - B. For hourly limitations for which compliance is to be determined on a 3-hour average basis, emission testing is required for the pollutant (see Condition 2.1.8). When compliance is determined from such testing, the results of such testing shall be compiled as the average of the individual test runs to determine compliance, as provided by 35 IAC Part 283.
- b.
 - i. The SO₂ emissions from the boilers shall comply with a lower hourly limit, pursuant to an evaluation conducted in accordance with Condition 2.1.16.

- ii. The SO₂ emissions from the coal-fired boilers, in total, in the initial years of operation of the plant through calendar year 2009 shall not exceed 10,679 tons and in calendar year 2010 shall not exceed 11,273 tons.

Note: The above limits on daily and annual SO₂ emissions in Conditions 2.1.7(a)(ii) and (b)(ii) reflect commitments made by the Permittee to the USFWS in response to concerns expressed by the USFWS about the impact of the plant on Air Quality Related Values in the Wilderness Area in the Mingo Wildlife Refuge in southeastern Missouri.

2.1.8 Emission Testing

- a. i. A. Within 60 days after achieving the maximum production rate at which a boiler will be operated but not later than 180 days after initial startup of each boiler, the Permittee shall have tests conducted for opacity and emissions of NO_x, CO, PM, VOM, SO₂, hydrogen chloride, hydrogen fluoride, sulfuric acid mist, and mercury and other metals, as follows, at its expense by an approved testing service while the boiler is operating at maximum operating load and other representative operating conditions. (In addition, the Permittee may also perform measurements to evaluate emissions at other load and operating conditions.)
 - B. This period of time may be extended by the Illinois EPA for up to an additional 365 days upon written request by the Permittee as needed to reasonably accommodate unforeseen difficulties in the startup and testing of the boiler, provided that initial performance testing required by the NSPS, 40 CFR Part 60, Subpart Da, has been completed for the boiler and the test report submitted to the Illinois EPA.
- ii. Between 9 and 15 months after performance of the initial testing that demonstrates compliance with applicable requirements, the Permittee shall have the emissions of PM, VOM, hydrogen chloride, hydrogen fluoride, sulfuric acid mist, and mercury and other metals from each affected boiler retested as specified above.
- iii. The Permittee shall conduct additional tests for PM emissions as needed for purposes of the evaluation of condensable PM₁₀ emissions required by Condition 2.1.17.
- iv. A. Thereafter, the Permittee shall also test PM emissions from each boiler as provided below at a regular interval that is no greater than 30 months, except as follows. If the results of two of these PM tests consecutively for a boiler demonstrate PM

emissions that are two thirds or less than the applicable limits (e.g., 0.010 lb/mmBtu or less for PM, as compared to the limit of 0.015 lb/mmBtu), the maximum interval for PM testing of such boiler will be at least once every 48 months. However, if a PM test for such a boiler then shows PM emissions that are more than two thirds of an applicable limit, the maximum interval between testing shall revert to 30 months until two consecutive tests again show PM emissions that are two thirds or less than the applicable limits. For the purpose of these provisions, the two consecutive tests must be at least 24 months apart.

Note: The CAAPP Permit may establish requirements for more frequent emission testing.

B. Whenever PM testing for a boiler is performed as required above, testing for emissions of mercury and hydrogen chloride shall also be performed as provided below.

- iv. In addition to the emission testing required above, the Permittee shall perform emission tests as provided below as requested by the Illinois EPA for a boiler within 45 days of a written request by the Illinois EPA or such later date agreed to by the Illinois EPA. Among other reasons, such testing may be required if there is a significant increase in the mercury or chlorine content of the fuel supply to the boilers.

Note: Specific requirements for periodic emission testing may be established in the CAAPP Permit for the plant.

- v. Within two years of the initial startup of each affected boiler, the Permittee shall have emission testing conducted for dioxin/furan emissions as provided below.

- b. The following methods and procedures shall be used for testing, unless other methods adopted by or being developed by USEPA are specified or approved by the Illinois EPA.

Opacity	Method 9
Location of Sample Points	Method 1
Gas Flow and Velocity	Method 2
Flue Gas Weight	Method 3 or 3A
Moisture	Method 4
Particulate Matter ¹	Method 5, or Methods 5 and Method 201 or 201A (40 CFR 51, Appendix M), with Method 19 as specified in 40 CFR 60.48a(b)
Condensable Particulate	Method 202 ²

Nitrogen Oxides ³	Method 19, as specified in 40 CFR 60.48a(d)
Sulfur Dioxides ³	Method 19, as specified in 40 CFR 60.48a(c)
Carbon Monoxide ³	Method 10
Volatile Organic Material ⁴	Methods 18 and 25A
Hydrogen Chloride	Method 26
Hydrogen Fluoride	Method 26
Sulfuric Acid Mist	Method 8 ²
Metals ^{5, 6}	Method 29
Dioxin/Furan	Method 23

Notes:

- ¹ The Permittee may report all PM emissions measured by USEPA Method 5 as PM₁₀, in which case separate testing using USEPA Method 201 or 201A need not be performed.
- ² Notwithstanding the general requirement to use USEPA test methods, appropriate refinements or adaptations shall be made to the USEPA test methods or other established test methods may be used for testing, subject to review and approval by the Illinois EPA to facilitate accurate and reliable measurements given the composition of the exhaust. In particular, adaptations shall be made to USEPA Method 202, to prevent positive bias from conversion of sulfur dioxide to sulfuric acid in the impingers, for example, by additional purges or separate, simultaneous measurements of the sulfuric acid emissions.
- ³ Emission testing shall be conducted for purposes of certification of the continuous emission monitors required by Condition 2.1.9. Thereafter, the NO_x, SO₂ and CO emission data from certified monitors may be provided in lieu of conducting emissions tests.
- ⁴ The Permittee may exclude methane, ethane and other exempt compounds from the results of any VOM test provided that the test protocol to quantify and correct for any such compounds is included in the test plan approved by the Illinois EPA.
- ⁵ For purposes of this permit, metals are defined as mercury, arsenic, beryllium, cadmium, chromium, lead, manganese, and nickel.
- ⁶ During the initial emissions testing for metals, the Permittee shall also conduct measurements using established test methods for the principle forms of mercury present in the emissions, i.e., particle bound mercury, oxidized mercury and elemental mercury.

- c.
 - i. Test plans, test notifications, and test reports shall be submitted to the Illinois EPA in accordance with the Condition 4.2.
 - ii. In addition to other information required in a test report, test reports shall include detailed information on the operating conditions of a boiler during testing, including:
 - A. Fuel consumption (in tons);
 - B. Composition of fuel (Refer to Condition 2.1.10(b)), including the metals, chlorine and fluorine content, expressed in pound per million Btu;
 - C. Firing rate (million Btu/hr) and other significant operating parameters of the boiler, including temperature of the flue gas entering the SCR;
 - D. Control device operating rates or parameter, e.g., SCR reagent injection rate, ESP voltages and current flows, WFGD pressure drop and reagent addition rate, WESP voltages current flows, and water flow rate;
 - E. Opacity of the exhaust from the boiler, 6-minute averages and 1-hour averages;
 - F. Turbine/Generator output rate (MWe gross).

2.1.9-1 Emissions Monitoring - SO₂, NO_x, CO and Opacity

- a.
 - i. The Permittee shall install, certify, operate, calibrate, and maintain continuous monitoring systems on each boiler for opacity, emissions of SO₂, NO_x and CO, and either oxygen or carbon dioxide in the exhaust. The opacity monitor shall be located before the wet control equipment as needed to prevent interference from moisture in the ductwork.
 - ii. The Permittee shall also operate and maintain these emissions monitoring systems according to site-specific monitoring plan(s), which shall be submitted at least 60 days before the initial startup of a boiler to the Illinois EPA for review and comment. With this submission, the Permittee shall submit the proposed type of monitoring equipment and proposed sampling location(s), which shall be approved by the Illinois EPA prior to installation of equipment.
 - iii. The Permittee shall fulfill the applicable requirements for monitoring in the NSPS, 40 CFR 60.13, 60.47a, and 40 CFR 60 Appendix B, the federal Acid Rain Program, 40 CFR Part 75; 35 IAC Part 217, Subpart W, the NO_x Trading Program for Electrical Generating Units; and NESHA 40 CFR 63.8 and 63.10. These rules require that the Permittee maintain detailed records for both the measurements made by these systems and the maintenance, calibration and operational activity associated with the monitoring systems.

- b. In addition, when NO_x or SO₂ emission data are not obtained from a continuous monitoring system because of system breakdowns, repairs, calibration checks and zero span adjustments, emission data shall be obtained by using standby monitoring systems, emission testing using appropriate USEPA Reference Methods, or other approved methods as necessary to provide emission data for a minimum of 75 percent of the operating hours in a boiler operating day, in at least 22 out of 30 successive boiler operating days, pursuant to 40 CFR 60.47a(f) and (h).

Note: Fulfillment of the above criteria for availability of emission data from a monitoring system does not shield the Permittee from potential enforcement for failure to properly maintain and operate the system.

- c. Compliance with the most stringent emission monitoring requirements for a pollutant is sufficient to demonstrate compliance with all emission monitoring requirements for that pollutant.

2.1.9-2 Emissions Monitoring - Mercury

- a. If the boilers are subject to Condition 2.1.2(c)(ii), the Permittee shall install, operate and maintain a continuous or semi-continuous monitoring system to measure the mercury emissions of each boiler using monitoring methodology and procedures developed, proposed or adopted by USEPA for monitoring of mercury emissions from coal-fired utility boilers, such as the monitoring and measurement method proposed by USEPA as USEPA Method 324 (40 CFR Part 63, Appendix B, Method 324).

Note: If the boilers are subject to Condition 2.1.2(c)(i), the Permittee will be subject to the monitoring requirements for mercury emissions set by the applicable USEPA regulations.

- b. The Permittee shall keep logs for the operation, calibration and maintenance of these monitoring systems.

2.1.10 Operational Monitoring and Measurements

- a. The Permittee shall install, evaluate, operate, and maintain meters to measure and record consumption of natural gas by each boiler.
- b.
 - i. The Permittee shall sample and analyze the sulfur and heat content of the coal supplied to the boilers in accordance with USEPA Reference Method 19 (40 CFR 60, Appendix A, Method 19).
 - ii. The Permittee shall analyze samples of all coal supplies that are components of the coal supply to the boilers and the coal supply, itself, for mercury and other metals and chlorine content, as follows:

- A. Analysis shall be conducted in accordance with USEPA Reference Methods or other method approved by USEPA.
 - B. Analysis of the fuel supply to the boiler, itself, shall be conducted in conjunction with performance testing of a boiler.
 - C. Analysis of representative samples of coal shall be conducted in conjunction with acceptance of coal from off-site.
 - D. Analysis of representative samples of coal shall be conducted at least every two years, if a more frequent analysis is not needed pursuant to the above requirements.
- c. i. The Permittee shall install, operate and maintain systems to measure key operating parameters of the control system for each boiler, including:
- A. Reagent injection rate for the SCR unit;
 - B. Voltages, currents and sparking rates for the ESP;
 - C. Reagent usage rate for the WFGD; and
 - D. Voltages, currents, sparking rates and water flow for the WESP.
- ii. The Permittee shall maintain the records of the measurements made by these systems and records of maintenance and operational activity associated with the systems.
- d. i. The Permittee shall install and operate a particulate matter continuous monitoring system on each boiler for the purpose of compliance assurance monitoring. The PM continuous monitoring system shall monitor PM concentration downstream of the WESP; provided, however, with approval of the Illinois EPA it may be shifted to upstream of the WFGD if it is demonstrated within six months of operation that the device cannot be reliably operated following a wet control device.
- ii. The Permittee shall operate, calibrate and maintain each such system in accordance with the applicable USEPA performance specification and other applicable requirements of the NSPS for monitoring systems and in a manner that is generally consistent with published USEPA guidance for use of such systems for compliance assurance monitoring.
- iii. The Permittee shall also operate and maintain these monitoring systems according to a site-specific monitoring

plan, which shall be submitted at least 60 days before the initial startup of a boiler to the Illinois EPA for its review and comment. With this submission, the Permittee shall submit the proposed type of monitoring equipment and proposed sampling location, which shall be approved by the Illinois EPA prior to installation of equipment.

2.1.11 Recordkeeping

- a. The Permittee shall maintain the following records with respect to operation and maintenance of each boiler and associated control equipment:
 - i. An operating log for the boiler that at a minimum shall address:
 - A. Each startup of the boiler, including the nature of the startup, sequence and timing of major steps in the startup, any unusual occurrences during the startup, and any deviations from the established startup procedures, with explanation;
 - B. Each shutdown of the boiler, including the nature and reason for the shutdown, sequence and timing of major steps in the shutdown, any unusual occurrences during the shutdown, and any deviations from the established shutdown procedures, with explanation; and
 - C. Each malfunction of the boiler system that significantly impairs emission performance, including the nature and duration of the event, sequence and timing of major steps in the malfunction, corrective actions taken, any deviations from the established procedures for such a malfunction, and preventative actions taken to address similar events.
 - ii. Inspection, maintenance and repair log(s) for the boiler system that, at a minimum, shall identify such activities that are performed related to components that may effect emissions; the reason for such activities, i.e., whether planned or initiated due to a specific event or condition; and any failure to carry out the established maintenance procedures, with explanation.
 - iii. Copies of the steam charts and daily records of steam and electricity generation.
- b. The Permittee shall maintain records of the following items related to fuels used in the boilers:
 - i. Records of the sampling and analysis of coal supply to the boilers conducted in accordance with Condition 2.1.10(b).

- ii. A. The sulfur content of coal, lb sulfur/million Btu, supplied to the boilers, as determined pursuant to Condition 2.1.10(b)(i); and
- B. The sulfur content of coal supplied to the boilers on a 30-day rolling average, determined from the above data.
- iii. The amount of fuel combusted in each boiler by type of fuel as specified in 40 CFR Part 60, Appendix A, Method 19.
- c. For each boiler, the Permittee shall maintain records of the following items related to emissions:
 - i. Records of SO₂, NO_x and PM emissions and operation for each boiler-operating day, as specified by 40 CFR 60.49a.
 - ii. A. With respect to the SO₂ reduction-based standard in 40 CFR 60.43a(a)(1), for each 30 day averaging period, the SO₂ emissions in lb/million Btu and the required SO₂ emission rate as determined by applying the permissible emission fraction to the potential SO₂ emission rate of the coal supply.
 - B. With respect to the SO₂ reduction in Condition 2.1.2(b)(ii)(B), for each 12 month period once this requirement takes effect, the actual SO₂ emissions, the theoretical "uncontrolled" SO₂ emissions, and the level of SO₂ control achieved.
 - iii. Records of CO emissions of the boiler based on the continuous emissions monitoring system required by Condition 2.1.9.
 - iv. Records of emissions of VOM, mercury and other pollutants from the boiler, based on fuel usage and other operating data for the boiler and appropriate emission factors, with supporting documentation.
- d. The Permittee shall record the following information for any period during which a boiler deviated from an applicable requirement:
 - i. Each period during which an affected unit exceeded the requirements of this permit, including applicable emission limits, which records shall include at least the information specified by Condition 4.3.
 - ii. Each period during which opacity of a boiler exceeded the level of opacity at which emission testing has demonstrated that the boiler would comply with particulate matter emission limits.

2.1.12 Notifications

- a. The Permittee shall notify the Illinois EPA within 30 days of deviations from applicable requirements that are not addressed by the regular reporting required pursuant to Condition 2.1.13. These notifications shall include the information specified by Condition 4.5.

2.1.13 Reporting

- a.
 - i. The Permittee shall fulfill applicable reporting requirements in the NSPS, 40 CFR 60.7(c) and 60.49a, for each boiler. For this purpose, quarterly reports shall be submitted to the Illinois EPA no later than 30 days after the end of each calendar quarter. (40 CFR 60.49a (i))
 - ii. In lieu of submittal of paper reports, the Permittee may submit electronic quarterly reports for SO₂ and/or NO_x and/or opacity. The electronic reports shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement indicating whether compliance with applicable emission standards and minimum data requirements of 40 CFR 60.49a were achieved during the reporting period. (40 CFR 60.49a(j))
- b.
 - i. Either as part of the periodic NSPS report or accompanying such report, the Permittee shall report to the Illinois EPA any and all opacity and emission measurements for a boiler that are in excess of the respective requirements set by this permit. These reports shall provide for each such incident, the pollutant emission rate, the date and duration of the incident, and whether it occurred during startup, malfunction, breakdown, or shutdown. If an incident occurred during malfunction or breakdown, the corrective actions and actions taken to prevent or minimize future reoccurrences shall also be reported. (40 CFR 60.7(c))
 - ii. These reports shall also address any deviations from applicable compliance procedures for a boiler established by this permit, including specifying periods during which the continuous monitoring systems were not in operation.
- c. The Permittee shall comply with applicable reporting requirements under the Acid Rain Program, with a single copy of such report sent to Illinois EPA, Division of Air Pollution Control Compliance Section.

2.1.14 Operational Flexibility/Anticipated Operating Scenarios

- a. The Permittee is authorized to use coal from off-site in the boilers, subject to the restrictions in Condition 1.3, without revision of this permit.

- b. This condition does not affect the Permittee's obligation to continue to comply with applicable requirements or to properly obtain a State construction permit in a timely manner for any activity involving the boiler or the fuel handling equipment that constitutes construction or modification of an emission unit, as defined in 35 IAC 201.102, or that entails receiving of coal by rail or truck. (See also Condition 1.3)

2.1.15 Construction of Additional Control Measures

- a. The Permittee is generally authorized under this permit to construct and operate additional devices and features to control emissions from a boiler, which are not described in the application for this permit, as follows. This condition does not affect the Permittee's obligation to comply with the applicable requirements for the boilers.
- b. This authorization only extends to devices or features such as sorbent injection systems that are designed to reduce emissions that are identified during the detailed design of the boilers and any refinements to that design that occur during construction and the initial operation of the boilers. These measures may also serve to improve boiler operation as they reduce consumption of materials, but do not include measures that would increase a boiler's rated heat input capacity.
- c. Prior to beginning actual construction of any such device or feature, the Permittee shall apply for and obtain a separate State construction permit for it from the Illinois EPA pursuant to 35 IAC Part 201, Subpart D.

2.1.16 Optimization of Daily Control of SO₂ Emissions

- a.
 - i. The Permittee shall evaluate SO₂ emissions from the boilers to determine whether a lower hourly limit may be reliably achieved by the SO₂ control system on a daily basis without unacceptable consequences, i.e., inability to comply with other emission limits or requirements, or significant risk to equipment or personnel, and without unreasonable consequences, i.e., a significant increase in actual particulate matter emissions from the boilers or a substantial increase in maintenance and repair needed for the boilers.
 - ii. A. If the Permittee fails to complete the evaluation or submit the required report in a timely manner as specified by Condition 2.1.16(b), the hourly SO₂ emission limit in Condition 2.1.7(a)(i) shall automatically become 1,350 lb/hour, daily average, not to be exceeded more than one day per month, annual average.

Note: This limit is based on the nominal capacity of each boiler and the SO₂ emission rate set as BACT, i.e., 0.182 lb/million Btu.

B. This permit will be revised to set lower limit(s) for SO₂ emissions (but no lower than the above default limit), if the Illinois EPA, after considering the results of any evaluation performed by the Permittee, finds that the boilers can and should be able to consistently comply with such limit(s) without unacceptable or unreasonable consequences. Additional factors, e.g., the load of the boiler, may be included in such limits to address specific modes of operation during which a particular limit may or may not be achievable.

- b. The Permittee shall perform this evaluation of SO₂ emissions in accordance with a plan submitted to the Illinois EPA for review and comment. The initial plan shall be submitted to the Illinois EPA no later than 180 days after initial start-up of a boiler.

The plan shall provide for systematic evaluation of change or variation, within the normal or feasible range of operation, in the following as related to the monitored SO₂ emissions:

- i. Sulfur content of the fuel supply;
 - ii. Boiler operating load and combustion settings, including excess oxygen;
 - iii. Levels of uncontrolled SO₂ and NO_x before the control devices, as predicted from fuel composition and operating data;
 - iv. Operating temperature and reagent injection rates for the SCR system;
 - v. Levels of uncontrolled sulfuric acid mist after the SCR, as predicted from operating data;
 - vi. Operating parameters of the electrostatic precipitator (ESP);
 - vii. Operating data and limestone usage rates for the scrubber;
 - viii. Operating parameters of the wet electrostatic precipitator (WESP); and
 - ix. Opacity, PM, NO_x, and sulfuric acid mist emissions.
- c. i. The Permittee shall promptly begin this evaluation after a boiler demonstrates compliance with all applicable short-term emission limits as shown by emission testing and monitoring.

- ii. With the final report for such compliance demonstration, the Permittee shall submit an update to the plan that describes its findings with respect to control of SO₂ emissions during the shakedown of the boilers as it highlights possible areas of concern for the detailed evaluation.
- d. i. This evaluation shall be completed and a detailed written report submitted to the Illinois EPA within three years after the initial startup of a boiler. This report shall include proposed alternative limit(s) for SO₂ emissions.
- ii. This deadline may be extended by the Illinois EPA for an additional year if the Permittee submits an interim report demonstrating the need for additional time to effectively evaluate SO₂ emissions.

2.1.17 Revision of Total PM₁₀ Emission Limit Based on Results of Emission Testing

- a. i. The emission limit for PM₁₀ in Condition 2.1.2(b) (i) (B) shall be lowered based on the results of emissions testing unless the Permittee demonstrates and the Illinois EPA concurs, based on an evaluation as provided by Condition 2.1.17, that a lower limit cannot be reliably met without unacceptable consequences, i.e., inability to comply with other emission limits or requirements or significant risk to equipment or personnel, and without unreasonable consequences, i.e., a significant increase in maintenance and repair needed for the boilers. For this purpose, the Permittee shall conduct at least four additional emission tests beyond the initial performance test (total of at least five tests) spread out during the period in which the evaluation is being performed.
- ii. A. If the Permittee fails to perform the necessary emission testing for evaluation of PM₁₀ emissions, the limit for PM₁₀ shall automatically be lowered to 0.018 lb/million Btu.
- B. If the Permittee fails to complete the evaluation in a timely manner in accordance with Condition 2.1.17(b), the limit for PM₁₀ shall automatically be lowered to the greater of (1) 0.018 lb/million Btu or (2) the sum of the average of the results from the required periodic compliance tests (excluding any tests showing noncompliance and any test results that do not reflect representative operating conditions or otherwise reflect outlying data) and the standard deviation of such results, rounded to two significant digits. (If the statistical evaluation of test results yields a value greater than 0.035 lb/million Btu, i.e., the limit in Condition 2.1.2(b), the limit shall remain at 0.035 lb/million Btu.)

- iii. This permit will be revised to set lower limit(s) for PM_{10} emissions (but no lower than the above default limits), if the Illinois EPA, after considering the result of any evaluation performed by the Permittee, finds that the boilers can and should be able to consistently comply with such limit(s) without unreasonable consequences.
- b. 1. If the Permittee elects to perform an evaluation for PM_{10} emissions, the evaluation shall be performed in accordance with a plan submitted to the Illinois EPA for review and comment. The plan shall provide for evaluation of PM_{10} emissions at moderate load operation of the boiler as well as operation at full load. The initial plan shall be submitted to the Illinois EPA no later than 180 days after initial start-up of a boiler.
 - ii. A. This evaluation shall be completed and a detailed written report submitted to the Illinois EPA within three years after the initial startup of a boiler. This report shall include proposed alternative limit(s) for PM_{10} emissions.
 - B. This deadline may be extended for an additional year if the Permittee submits an interim report demonstrating the need for additional data to effectively set a revised limit for PM_{10} emissions. During this year, at least two more performance tests for PM_{10} emissions shall be conducted.

CONDITION 2.2: UNIT-SPECIFIC CONDITIONS FOR FUEL AND OTHER BULK MATERIAL HANDLING, PROCESSING AND STORAGE OPERATIONS

2.2.1 Description of Emission Units

The affected units for the purpose of these unit-specific permit conditions are operations that handle coal and other materials in bulk that are involved with the operation of the power plant (including the mine facility) and have the potential for particulate matter emissions, including coal, rock, limestone, and ash. Affected units include receiving, transfer, handling, storage, processing or preparation (crushing, etc.) and loading operations for such materials.

2.2.2 Control Technology Determination

- a. Emissions of particulate matter from affected units, other than storage piles, including associated material handling operations, coal-handling operations at the mine facility, and the transfer belt between the mine facility and the power plant facility, shall be controlled with enclosures and aspiration to baghouses or other filtration devices. These control devices shall be operated in accordance with good air pollution control practices to minimize emissions.
- b. There shall be no visible fugitive emissions, as defined by 40 CFR 60.671, from storage buildings unless such emissions comply with the requirements of Condition 2.2.3(a).
- c.
 - i. Coal handling operations at the mine facility, other than associated with storage piles, and the transfer belt between the mine facility and the power plant facility shall be controlled by enclosure or covers and fogging, material quality, or application of water or other dust suppressants so as to minimize fugitive emissions to the extent practicable.
 - ii. For this purpose, for each affected unit, either (1) there shall be no visible emissions from the affected unit, as determined in accordance with USEPA Method 22, or (2) a nominal control efficiency for particulate matter emissions of at least 99 percent shall be achieved from the uncontrolled emission rate, as determined using appropriate USEPA emission factors for uncontrolled particulate emissions and engineering analysis and calculations.
- d.
 - i. Storage piles, including material handling operations associated with the piles, shall be controlled by application of water or other dust suppressants so as to minimize fugitive emissions to the extent practicable.
 - ii. A. For this purpose, except for limestone, a nominal control efficiency of at least 90 percent shall be achieved from the uncontrolled emission rate, as determined using appropriate USEPA emission factors for uncontrolled particulate emissions and engineering analysis and calculations.

- B. For limestone, (1) a nominal control efficiency of at least 99 percent shall be achieved, or (2) there shall be no visible emissions from the affected unit, as determined in accordance with USEPA Method 22.

2.2.3 Applicable Federal Emission Standards

- a. Affected units engaged in handling limestone shall comply with applicable requirements of the NSPS for Nonmetallic Mineral Processing Plants, 40 CFR 60, Subpart 000 and related provisions of 40 CFR 60, Subpart A.
 - i. Pursuant to the NSPS, stack emissions of particulate matter are subject to the following limitations:
 - A. The rate of emissions shall not exceed 0.05 gram/dscm (0.02 gr/dscf). (40 CFR 60.672(a)(1))
 - B. The opacity of emissions shall not exceed 7 percent. (40 CFR 60.672(a)(2))
 - ii. Pursuant to the NSPS, fugitive emissions of particulate matter are subject to the following limitations:
 - A. The opacity of emissions from grinding mills, screens, (except truck dumping) storage bins, and enclosed truck or railcar loading operations shall not exceed 10 percent. (40 CFR 60.672(b) and (d))
 - B. The opacity of emissions from crushers shall not exceed 10 percent. (40 CFR 60.672(b))
 - C. Truck dumping into any screening operation, feed hopper, or crusher is exempt from the above standards. (40 CFR 60.672(d))
- b. Affected units engaged in handling and processing coal shall comply with applicable requirements of the NSPS for Coal Preparation Plants, 40 CFR 60, Subpart Y, and related provisions of 40 CFR 60, Subpart A.

Pursuant to the NSPS, the opacity of the exhaust from coal processing and conveying equipment, coal storage systems (other than open storage piles), and coal loading systems shall not exceed 20 percent (40 CFR 60.252(c)).
- c. At all times, the Permittee shall maintain and operate affected units that are subject to NSPS, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions, pursuant to 40 CFR 60.11(d).

2.2.4 Applicable State Emission Standards

- a. The emission of smoke or other particulate matter from affected units shall not have an opacity greater than 30 percent, except as allowed by 35 IAC 212.124. Compliance with this limit shall be determined by 6-minute averages of opacity measurements in accordance with USEPA Reference Method 9. [35 IAC 212.109 and 212.123(a)]
- b. With respect to emissions of fugitive particulate matter, affected units shall comply with 35 IAC 212.301, which provides that visible emissions of fugitive particulate matter shall not be visible from any process, including any material handling or storage activity, when looking generally toward the zenith at a point beyond the property line of the source, except when the wind speed exceeds 25 miles per hour, as provided by 35 IAC 212.314.
- c. The emissions of particulate matter from affected units other than units excluded by 35 IAC 212.323 (refer to Condition 2.2.5(a)) shall comply with the applicable limit pursuant to 35 IAC 212.321, which rule limits emissions based on the process weight rate of emission units and allows a minimum emission rate of 0.55 lb/hour for any individual unit.

2.2.5 Applicability of Other Regulations

This permit is issued based on the coal piles and associated operations, coal handling operations at the mine facility, and the transfer belt between the mine facility and the power plant facility not being subject to 35 IAC 212.321 pursuant to 35 IAC 212.323, which provides that 35 IAC 212.321 shall not apply to emission units, such as stock piles, to which, because of the disperse nature of such emission units, such rules cannot reasonably be applied.

2.2.6 Operating Requirements

- a.
 - i. The power plant facility shall be designed and operated to store bulk materials that have the potential for particulate matter emissions, other than coal, limestone, wetted bottom ash and scrubber sludge, in silos, bins, and buildings, without storage of such material in outdoor piles except on a temporary basis during breakdown or other disruption in the capabilities of the enclosed storage facilities.
 - ii. Outdoor coal piles shall be equipped and operated with adjustable stacker(s), rotary stacker(s), ladders or other comparable devices to minimize the distance that material drops when added to the pile and minimize the associated particulate matter emissions.

- b. i. The Permittee shall carry out control of fugitive particulate matter emissions from affected units in accordance with a written operating program describing the measures being implemented in accordance with Conditions 2.2.2 and 2.2.6(a) to control emissions at each area of the plant with the potential to generate more than trivial amounts of such emissions, which program shall be kept current.
 - A. This program shall include maps or diagrams indicating the location of affected units with the potential for fugitive emissions, accompanied by the following information for each such unit: a general description of the unit, its size (area or volume), the expected level of activity, the nature and extent of enclosure, and a description of installed air pollution control equipment.
 - B. This program shall include a detailed description of any additional emission control techniques (e.g., water or surfactant spray) including: typical flow of water and additive concentration; rate or normal frequency at which measures would be implemented; circumstances in which the measures would not be implemented e.g., adequate surface moisture on material; triggers for additional control, e.g. observation of 10 percent or greater opacity; and calculated control efficiency.
- ii. The Permittee shall submit copies of this operating program to the Illinois EPA for review as follows:
 - A. A program for the construction of the plant shall be submitted within 30 days of beginning actual construction of the source.
 - B. The initial operating program for the plant shall be submitted within 90 days of initial start up of the plant.
 - C. Significant amendments to the program by the Permittee shall be submitted within 30 days.
- iii. A revised operating program shall be submitted to the Illinois EPA for review within 90 days of a request from the Illinois EPA for revision to address observed deficiencies in control of fugitive emissions.
- c. The Permittee shall conduct inspections of affected units on at least a monthly basis with personnel not directly responsible for the day-to-day operation of these units, for the specific purpose of verifying that the measures identified in the operating program and other measures required to control emissions from affected units are being properly implemented. When the plant

begins to handle bulk materials in the affected units, these inspections shall include observation for the presence of visible emissions, performed in accordance with USEPA Method 22, from buildings and structures in which affected units are located and from units from which the Permittee has elected to demonstrate no visible emissions.

2.2.7 Emission Limitations

Emissions from affected units shall not exceed the limitations in Attachment 1, Table II and the limitations specified in the records required by Condition 2.2.11(a).

2.2.8 Emission Testing

- a.
 - i.
 - A. Within 60 days after achieving the maximum production rate at which an affected emission unit subject to NSPS will be operated, but not later than 180 days after initial startup of each such unit, the Permittee shall have emissions tests conducted at its expense as follows below by an approved testing service under unit operating conditions that are representative of maximum emissions.
 - B. This period of time may be extended by the Illinois EPA upon written request by the Permittee as needed to reasonably accommodate unforeseen difficulties in the startup and testing of an affected unit, provided that initial emissions testing required by the NSPS has been completed for the unit and the test report has been submitted to the Illinois EPA.
 - ii. In addition to the initial emission testing required above, the Permittee shall perform emission tests as requested by the Illinois EPA for an affected unit within 45 days of a written request by the Illinois EPA or such later date agreed to by the Illinois EPA.
- b. The following methods and procedures shall be used for emission testing:
 - i. The following USEPA methods and procedures shall be used for particulate matter and opacity measurements for the affected units subject to 40 CFR Part 60, Subpart 000, as specified in 40 CFR 60.675:

Particulate Matter	Method 5 or 17
Opacity	Method 9
 - ii. The following USEPA methods and procedures shall be used for particulate matter and opacity measurements for the affected units subject to 40 CFR 60, Subpart Y, as specified in 40 CFR 60.254:

Particulate matter - Method 5, the sampling time and sample volume for each run shall be at least 60 minutes and 30 dscf. Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin.

Opacity - Method 9, opacity measurements shall be performed by a certified observer.

- c. Test plan(s), test notifications, and test reports shall be submitted to the Illinois EPA in accordance with Condition 4.2.

2.2.9 Operational Monitoring and Measurements

- a. The Permittee shall install, operate and maintain systems to measure the pressure drop across each baghouse used to control affected units.

Note: This requirement does not apply to bin vent filters and other similar filtration devices.

- b. The Permittee shall maintain the records of the measurements made by these systems and records of maintenance and operational activity associated with the systems.

2.2.10 Emissions Monitoring

None

2.2.11 Recordkeeping

- a. The Permittee shall maintain files, which shall be kept current, that contain:
 - i. A. For the baghouses or other filter devices associated with affected units, design specifications for each device (type of unit, maximum design exhaust flow (acfm or scfm), filter area, type of filter cleaning, performance guarantee for particulate exhaust loading in gr/scf, etc.), the manufacturer's recommended operating and maintenance procedures for the device, and design specification for the filter material in each device (type of material, surface treatment(s) applied to material, weight, performance guarantee, warranty provisions, etc.).
 - B. For each baghouse, the normal range of pressure drop across the device and the minimum and maximum safe pressure drop for the device, with supporting documentation.
- ii. For affected units that are not controlled with baghouses or other filter devices, a detailed description of the work practices used to control emissions of particulate matter.

- iii. The designated particulate matter emission rate, in pounds/hour and tons/year, from the affected unit with supporting calculations and documentation, including detailed documentation for the level of emissions control achieved through the work practices that are used to control particulate matter emissions. For each category of affected unit (e.g., coal and limestone receiving and handling), the sum of these emission rates shall not exceed the totals in Table II for the category of affected unit. (See also Condition 2.2.2 and 2.2.7.)
- b. The Permittee shall keep records for the amount of bulk materials received by or shipped from the plant by category or type of material (tons/month).
- c. For affected units that are subject to NSPS, the Permittee shall fulfill applicable recordkeeping requirements of the NSPS, 40 CFR 60.7 and 60.676.
- d. The Permittee shall keep inspection and maintenance logs for each control device associated with an affected unit.
- e. The Permittee shall maintain records documenting implementation of the fugitive emission operating program required by Condition 2.2.6, including:
 - i. Records for inspections required by Condition 2.2.6(c) to verify the implementation of continuous control measures (that are to be in place whenever an affected unit is in operation), including the date and time, the name of the responsible party, identification of the affected unit(s) that were inspected, and the observed condition of control measures;
 - ii. Records for the implementation of intermittent control measures, i.e., application of suppressants including identification of the affected unit, identification of the suppressant, application rate, dates or date and time of applications, and quantity of total suppressant applied;
 - iii. Records for application of physical or chemical control agents other than water including the name of the agent; target application concentration, if diluted with water; target application rate; and usage of the agent, gallons/month; and
 - iv. A log recording incidents when specified control measures were not present or were not used for an affected unit when it was in operation, including description, date, duration, means by which the incident was identified, and a statement of explanation.

- f. The Permittee shall record any period during which an affected unit was in operation when its baghouse was not in operation or was not operating properly, as follows:
- i. Each period when the pressure drop of a baghouse, as measured pursuant to Condition 2.2.9, deviated outside the levels set as good air pollution control practices (date, duration and description of the event).
 - ii. Each period when a baghouse failed to operate properly, which records shall include at least the information specified by Condition 4.3.
 - iii. Each period during which an affected unit deviated from the requirements of this permit, including applicable emission limits, which records shall include at least the information specified by Condition 4.3 and an estimate of the additional emissions of particulate matter that resulted, if any, with supporting calculations.
- g. The Permittee shall keep records for all opacity observations made in accordance with USEPA Method 9 for affected units that it conducts or that are conducted on its behalf by individuals who are certified to make such observations. For each occasion on which such observations are made, these records shall include the identity of the observer, a description of the various observations that were made, the observed opacity from individual units, and copies of the raw data sheets for the observations.
- h. The Permittee shall maintain the following records for the emissions of the affected units:
- Records of emissions of particulate matter based on operating data for the unit(s) and appropriate emission factors, with supporting documentation and calculations.

2.2.12 Notifications

The Permittee shall notify the Illinois EPA within 30 days of deviations from applicable emission standards or operating requirements for the affected units that continue* for more than 24 hours. These notifications shall include the information specified by Condition 4.5.

- * For this purpose, time shall be measured from the start of a particular event. The absence of a deviation for a short period shall not be considered to end the event if the deviation resumes. In such circumstances, the event shall be considered to continue until corrective actions are taken so that the deviation ceases or the Permittee takes the affected unit out of service for repairs.

2.2.13 Reporting

- a. The Permittee shall submit quarterly reports to the Illinois EPA for all deviations from emission standards, including standards for visible emissions and opacity, and operating requirements set by this permit. These notifications shall include the information specified by Condition 4.5.
- b. These reports shall also address any deviations from applicable compliance procedures established by this permit for affected units.

2.2.14 Flexibility

The Permittee is authorized, as follows, to construct and operate affected units that differ from those described in the application without obtaining further approval by the Illinois EPA. This condition does not affect the Permittee's obligation to comply with all applicable requirements for affected units:

- a. This authorization only extends to changes that result from the detailed design of the plant and any refinements to that design of the affected units that occur during construction and the initial operation of the plant.
- b. With respect to air quality impacts, these changes shall generally act to improve dispersion and reduce impacts, as emissions from individual units are lowered, units are moved apart or away from the fence line, stack heights are increased, and heights of nearby structures are reduced.
- c. The Permittee shall notify the Illinois EPA prior to proceeding with any changes. In this notification, the Permittee shall describe the proposed changes and explain why the proposed changes will act to reduce impacts, with detailed supporting documentation.
- d. Upon written request by the Illinois EPA, the Permittee shall promptly have air quality dispersion modeling performed to demonstrate that the overall effect of the changes is to reduce air quality impacts, so that impacts from affected units remain at or below those predicted by the air quality analysis accompanying the application.

CONDITION 2.3: UNIT-SPECIFIC CONDITIONS FOR COOLING TOWERS**2.3.1 Description of Emission Units**

The affected units for the purpose of these unit-specific conditions are the two cooling towers associated with the steam cycle for each boiler. The cooling towers are sources of particulate matter because of mineral material present in the water, which is emitted to the atmosphere due to water droplets that escape from the cooling tower or completely evaporate. The emissions of particulate matter are controlled by drift eliminators, which collect water droplets entrained in the air exhausted from the cooling towers.

2.3.2 Control Technology Determination

The affected units shall be equipped, operated, and maintained with drift eliminators designed to limit the loss of water droplets from the unit to not more than 0.0005 percent of the circulating water flow.

2.3.3 Applicable Federal Emission Standards

None

2.3.4 Applicable State Emission Standards

Visible emission of fugitive particulate matter from the affected units shall comply with 35 IAC 212.301, which provides that visible emissions of fugitive particulate matter shall not be visible from any process, including any material handling or storage activity, when looking generally toward the zenith at a point beyond the property line of the source, except as provided by 35 IAC 212.314.

2.3.5 Applicability of Other Regulations

None

2.3.6 Operating Requirements

- a. Chromium-based water treatment chemicals, as defined in 40 CFR 63.401, shall not be used in the affected units.
- b.
 - i.
 - A. The Permittee shall equip the affected units with appropriate features, such as steam reheat, to enable them to be operated without a significant contribution to fogging and icing on offsite roadways during periods when fogging or icing are present in the area or weather conditions are conducive to fogging or icing.
 - B. Notwithstanding the above, the Permittee need not include such features in the affected units if it demonstrates by appropriate analysis, as approved in writing by the Illinois EPA, that the cooling towers

will be sited and designed and can be operated such that additional features are not needed to prevent a significant contribution to fogging and icing on offsite roadways.

- ii. No later than 30 days after completion of the detailed design of the affected units and at least 60 days before construction of the affected units is begun, the Permittee shall submit a summary of the detailed design to the Illinois EPA and either:
 - A. A detailed description of the physical features that will be included in the affected units to satisfy Condition 2.3.6(b)(i)(A), the practices that would be followed for such features, and a demonstration that such features will be sufficient to prevent a significant contribution to fogging and icing on offsite roadways, for review and comment by the Illinois EPA; or
 - B. An analysis pursuant to Condition 2.3.6(b)(i)(B), including any operational practices that would be followed for the affected units to prevent a significant contribution to fogging and icing on offsite roadways, for review and approval by the Illinois EPA.
- c. The Permittee shall operate and maintain the affected units, including the drift eliminators, in a manner consistent with good air pollution control practices for minimizing emissions.
- d. The Permittee shall operate and maintain the affected units in accordance with written operating procedures, which procedures shall be kept current. These procedures shall address the practices that will be followed as good air pollution control practices and the actions that will be followed to prevent a significant contribution to icing and fogging on offsite roadways.

2.3.7 Emission Limitations

The total annual emissions of particulate matter from the affected units shall not exceed 15.0 tons/year, as determined by appropriate engineering calculations.

2.3.8 Emission Testing

None

2.3.9 Work Practices

The Permittee shall maintain the drift eliminators in the affected units in a manner consistent with good air pollution control practices for minimizing emissions.

2.3.10 Operational Monitoring and Measurements

- a. The Permittee shall measure the total dissolved solids content in the water being circulated in the affected units on at least a monthly basis. Measurements of the total dissolved solids content in the wastewater discharge associated with the affected units, as required by a National Pollution Discharge Elimination System permit, may be used to satisfy this requirement if the effluent has not been diluted or otherwise treated in a manner that would significantly reduce its total dissolved solids content.
- b. Upon written request by the Illinois EPA, the Permittee shall promptly have the water circulating in the affected units sampled and analyzed for the presence of hexavalent chromium in accordance with the procedures of 40 CFR 63.404(a) and (b).

2.3.11 Records

- a. The Permittee shall keep a file that contains:
 - i. The design loss specification for the drift eliminators installed in each affected unit.
 - ii. The suppliers' recommended procedures for inspection and maintenance of the drift eliminators.
 - iii. The operating factors, if any, used to determine the amount of water circulated in the affected units or the particulate matter emissions from the affected units, with supporting documentation.
 - iv. Copies of the Material Safety Data Sheets or other comparable information from the suppliers for the various water treatment chemicals that are added to the water circulated in the affected units.
- b. The Permittee shall keep the following operating records for the affected units:
 - i. The amount of water circulated in the affected units, gallons/month. As an alternative to direct data for water flow, these records may contain other relevant operating data for the units (e.g., water flow to the units) from which the amount of water circulated in the units may be reasonably determined.
 - ii. Each occasion when the Permittee took action to prevent a significant contribution to fogging or icing from the affected units, including the date and duration, the action or actions that were taken, the weather conditions that triggered such actions, and the weather conditions when such actions were terminated.

- c. The Permittee shall keep inspection and maintenance logs for the drift eliminators installed in each affected unit.
- d. The Permittee shall maintain records for the particulate matter emissions of the affected units based on the above records, the measurements required by Condition 2.3.10(a), and appropriate USEPA emission estimation methodology and emission factors, with supporting calculation.

2.3.12 Notifications

The Permittee shall notify the Illinois EPA within 30 days of deviations from applicable requirements that are not addressed by the regular reporting required by Condition 2.3.13. These notifications shall include the information specified by Condition 4.5.

- 2.3.13 If the cooling towers are equipped with features to address fogging and icing, as addressed by Condition 2.3.6(b), the Permittee shall submit quarterly reports to the Illinois EPA summarizing the records required by Condition 2.3.11(b)(ii) and identifying any deviation from established practices for the use of such features.

CONDITION 2.4: UNIT-SPECIFIC CONDITIONS FOR THE AUXILIARY BOILER**2.4.1 Description of Emission Unit**

The affected unit for the purpose of these unit-specific conditions is the auxiliary boiler for the plant, which is fired with natural gas. The auxiliary boiler is used to produce low-pressure steam to maintain the plant when the coal-fired boilers are not in operation and to support the startup of the coal-fired boilers.

2.4.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Boiler	Natural Gas-Fired Boiler, with Nominal Rated Heat Input Capacity of 245 Million Btu/Hr	Low-NO _x Burner

2.4.3 Control Technology Determination

- a. The only fuel burned in the auxiliary boiler shall be natural gas.
- b. The emissions from the affected boiler shall not exceed the following limits except during startup, shutdown and malfunction as addressed by Condition 2.4.3(c).
 - i. NO_x - 0.167 lb/million Btu.

This limit shall apply as a 3-hour block average, with compliance determined by emission testing in accordance with Condition 2.4.9 and equipment operation.
 - ii. CO - 0.11 lb/million Btu.

This limit shall apply as a 3-hour block average, with compliance determined by emission testing in accordance with Condition 2.4.9 and equipment operation.
 - iii. VOM - 0.013 lb/million Btu.

This limit shall apply as a 3-hour block average, with compliance determined by emission testing in accordance with Condition 2.4.9 and equipment operation.
- c. The Permittee shall use reasonable practices to minimize emissions during startup, shutdown and malfunction of the auxiliary boiler, including:
 - i. Operation of the boiler and associated air pollution control equipment in accordance with written operating procedures that include startup, shutdown and malfunction plan(s); and

- ii. Inspection, maintenance and repair of the boiler and associated air pollution control equipment in accordance with written maintenance procedures.

2.4.4 Applicable Federal Emission Standards

- a. The auxiliary boiler is subject to the NSPS for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60, Subpart Db, and related provisions in Subpart A.
- b. At all times, the Permittee shall maintain and operate the auxiliary boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practices for minimizing emissions, pursuant to 40 CFR 60.11(d).
- c. The auxiliary boiler is not subject to NO_x emission standards under the NSPS because the annual capacity factor shall be less than 10 percent for natural gas.

2.4.5 Applicable State Emission Standards

- a. The emission of smoke or other particulate matter from the auxiliary boiler shall not have an opacity greater than 30 percent, except as allowed by 35 IAC 212.124. Compliance with this limit shall be determined by 6-minute averages of opacity measurements in accordance with USEPA Reference Method 9. [35 IAC 212.109 and 212.123(a)]
- b. The emission of carbon monoxide (CO) into the atmosphere from the auxiliary boiler shall not exceed 200 ppm, corrected to 50 percent excess air. [35 IAC 216.121]

2.4.6 Applicability of other Regulations

This permit is issued based on the auxiliary boiler not being an electrical generating unit, so that provisions of the federal Acid Rain Program are not applicable to the boiler.

2.4.7 Operating Requirements

- a. The auxiliary boiler shall only be fired with natural gas.
- b.
 - i. The annual capacity factor of the affected boiler, as defined by 40 CFR 60.41b, shall not exceed 10 percent.
 - ii. Following the shakedown period for the coal-fired boilers, the auxiliary boiler shall not operate for more than 500 hours per year. Compliance with this limit shall be determined from a running total of 12 months of data.
- c. The rated heat input of the auxiliary boiler shall not exceed 245 million Btu/hour.

2.4.8 Emission Limitations

Emissions of NO_x, VOM, CO, and PM from the auxiliary boiler shall not exceed 10.3, 0.8, 6.8, and 0.5 tons/year, respectively. Compliance with these annual limits shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months.

2.4.9 Emission Testing

- a.
 - i. Within 60 days after achieving the maximum production rate at which the auxiliary boiler will be operated, but not later than 180 days after initial startup of the boiler, the Permittee shall have tests conducted for opacity and emissions of NO_x, CO and VOC, as follows, at its expense by an approved testing service while the boiler is operating at maximum operating load and other representative operating conditions.
 - ii. In addition to the emission testing required above, the Permittee shall perform emission tests as requested by the Illinois EPA for the auxiliary boiler within 45 days of a written request by the Illinois EPA or such later date agreed to by the Illinois EPA.
- b. The following methods and procedures shall be used for testing, unless otherwise specified or approved by the Illinois EPA.

Opacity	Method 9
Location of Sample Points	Method 1
Gas Flow and Velocity	Method 2
Flue Gas Weight	Method 3 or 3A
Moisture	Method 4
Nitrogen Oxides	Method 19 as specified in 40 CFR 60.48b
Carbon Monoxide	Method 10
Volatile Organic Compounds	Methods 25A and 18
- c. Test plans, test notifications, and test reports shall be submitted to the Illinois EPA in accordance with Condition 4.2.

2.4.10 Operational Monitoring and Measurements

None

2.4.11 Emission Monitoring

None

2.4.12 Recordkeeping

- a. The Permittee shall keep a file that contains:

The rated heat input capacity of the auxiliary boiler as provided by the manufacturer or subsequently determined based on the demonstrated heat input capacity of the boiler.

- b. The Permittee shall maintain the following operating records for the auxiliary boiler:
 - i. An operating log or other record that among other matters identifies each period when the boiler is operated and includes the information specified by 40 CFR 60.7(b).
 - ii. A summary of operating hours (hours/month and hours/year) for all operation and operation when a coal boiler was operating.
 - iii. Natural gas usage on a monthly basis (cubic feet).
- c. The Permittee shall maintain a maintenance and repair log for the auxiliary boiler.
- d. The Permittee shall keep records of the annual NO_x, VOM, CO and PM emissions from the auxiliary boiler, based on fuel consumption and applicable emission factors, with supporting calculations.

2.4.13 Notifications

The Permittee shall notify the Illinois EPA within 30 days of deviations from applicable requirements. These notifications shall include the information specified by Condition 4.5.

2.4.14 Reporting

- a. The Permittee shall fulfill applicable reporting requirements of the NSPS, 40 CFR 60.7 and 60.49b, for the auxiliary boiler by sending applicable notifications and reports to the Illinois EPA, including:

Notification of the date of initial startup of the boiler, as provided by 40 CFR 60.7. This notification shall include: (1) the design heat input of the boiler, and (2) the annual capacity factor at which the Permittee anticipates operating the boiler. (40 CFR 60.49b(a)).

2.4.15 Compliance Procedures

Compliance of the auxiliary boiler with the emission limits in Condition 2.4.8 shall be based on the operating records required by Condition 2.4.12 and appropriate emission factors.

- a. The emission factors for NO_x, CO, and VOM shall be based on the results of the emission testing required by Condition 2.4.9.
- b. A published USEPA emission factor, as follows, may be used for PM when the boiler operates properly.

PM 0.0076 lb/million Btu

CONDITION 2.5: UNIT-SPECIFIC CONDITIONS FOR ROADWAYS AND OTHER OPEN AREAS**2.5.1 Description of Emission Units**

The affected units for the purpose of these unit-specific conditions are roadways, parking areas, and other open areas at the plant, which may be sources of fugitive particulate matter due to vehicle traffic or wind blown dust.

2.5.2 Control Technology Determination

- a.
 - i. Good air pollution control practices shall be implemented to minimize and significantly reduce nuisance dust from affected units. After construction of the plant is complete, these practices shall provide for pavement on all regularly traveled roads and treatment (flushing, vacuuming, dust suppressant application, etc.) of paved and unpaved roads and areas that are routinely subject to vehicle traffic for very effective and effective control of dust, respectively (nominal 90 percent control for paved roads and areas and 80 percent control for unpaved roads and areas).
 - ii. For this purpose, roads that serve a main office, employee parking areas or are used on a daily basis by operating and maintenance personnel for the plant in the course of their typical duties, roads that experience heavy use during regularly occurring maintenance of the power plant facility during the course of a year, shall all be considered to be subject to regular travel and are required to be paved. Regularly traveled roads shall be considered to be subject to routine vehicle traffic except as they are used primarily for periodic maintenance and are currently inactive or as traffic has been temporarily blocked off. Other roads shall be considered to be routinely traveled if activities are occurring such that they are experiencing significant vehicle traffic.
- b. The handling of material collected from any affected unit by sweeping or vacuuming trucks shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods to control emission of particulate matter.

2.5.3 Applicable Federal Emission Standards

None

2.5.4 Applicable State Emission Standards

- a. Affected units shall comply with 35 IAC 212.301, which provides that emissions of fugitive particulate matter shall not be visible from any process, including any material handling or storage activity, when looking generally toward the zenith at a point beyond the property line of the source, except when the wind speed is greater than 25 miles per hour, as provided by 35 IAC 212.314.

2.5.5 Applicability of Other Regulations

This permit reflects a determination by the Illinois EPA that the source is a power plant or electrical generating operation so that the provisions of 35 IAC 212.306 are not applicable to roads and parking areas at the source. [35 IAC 212.306]

2.5.6 Operating Requirements

- a. The Permittee shall carry out control of fugitive particulate matter emissions from affected units in accordance with a written operating program describing the measures being implemented in accordance with Conditions 2.5.2 and 2.5.4 to control emissions at each unit with the potential to generate significant quantities of such emissions, which program shall be kept current.
 - i. This program shall include maps or diagrams indicating the location of affected units with the potential to generate significant quantities of fugitive particulate matter, with description of the unit (length, width, surface material, etc.) and volume and nature of expected vehicle traffic, or other activity on such unit, and an identification of any roadways that are not considered routinely traveled, with justification.
 - ii. This program shall include a detailed description of the emissions control technique (e.g., vacuum truck, water spray, surfactant spray, water flushing, dust suppressant application, or sweeping) for the affected unit, including: typical application rate; type and concentration of additives; normal frequency with which measures would be implemented; circumstances, in which the measure would not be implemented, e.g., recent precipitation; triggers for additional control, e.g., observation of 10 percent opacity; and calculated control efficiency for particulate matter emissions.
- b. The Permittee shall submit copies of this operating program to the Illinois EPA for review as follows:
 - i. A program addressing the construction of the plant shall be submitted within 30 days of beginning actual construction of the source.
 - ii. A program addressing the operation of the plant shall be submitted within 90 days of initial start up of the plant.
 - iii. Significant amendments to the program by the Permittee shall be submitted within 30 days of the date that the amendment is made.

- c. A revised operating program shall be submitted to the Illinois EPA for review within 90 days of a request from the Illinois EPA for revision to address observed deficiencies in control of fugitive particulate emissions.
- d. The Permittee shall conduct inspections of affected units on at least a weekly basis during construction of the plant and on a monthly basis thereafter with personnel not directly responsible for the day-to-day implementation of the fugitive dust control program, for the specific purpose of verifying that the measures identified in the operating program and other measures required to control emissions from affected units are being properly implemented.

2.5.7 Emission Limitations

The total annual emissions of particulate matter from the affected units shall not exceed 9.1 tons/year, as determined by appropriate engineering calculations.

2.5.8 Emission Testing

None

2.5.9 Operational Monitoring and Measurements

None

2.5.10 Emission Monitoring

None

2.5.11 Records

- a. The Permittee shall keep a file that contains:
 - i. The operating factors, if any, used to determine the amount of activity associated with the affected units or the particulate matter emissions from the affected units, with supporting documentation.
 - ii. The designated particulate matter emission rate, in tons/year, from each category of emission unit (e.g., traffic associated with receiving of limestone), with supporting calculations and documentation. The sum of these rates shall not exceed the annual limit on emissions in Condition 2.5.7.
- b. The Permittee shall maintain records documenting implementation of the operating program required by Condition 2.5.6, including:
 - i. For each treatment of an affected unit or units, the name and location of the affected unit(s), the date and time, and the identification of the truck(s) or treatment equipment used;

- ii. For each application of water or chemical solution by truck: application rate of water or suppressant, frequency of each application, width of each application, total quantity of water or chemical used for each application and, for each application of chemical solution, the concentration and identity of the chemical;
 - iii. For application of physical or chemical control agents: the name of the agent, application rate and frequency, and total quantity of agent and, if diluted, percent of concentration, used each day; and
 - iv. A log recording incidents when control measures were not used and incidents when additional control measures were used due to particular activities, including description, date, a statement of explanation, and expected duration of such circumstances.
- c. The Permittee shall record any period during which an affected unit was not properly controlled as required by this permit, which records shall include at least the information specified by Condition 4.3 and an estimate of the additional emissions of particulate matter that resulted, if any, with supporting calculations.
- d. The Permittee shall maintain records for the particulate matter emissions of the affected units based on plant operating data, the above records for the affected unit including data for implementation of the operating program, and appropriate USEPA emission estimation methodology and emission factors, with supporting calculations.

2.5.12 Notifications

The Permittee shall notify the Illinois EPA within 30 days of deviations from applicable requirements for affected units that are not addressed by the regular reporting required below. These notifications shall include the information specified by Condition 4.5.

2.5.13 Reporting

The Permittee shall submit quarterly reports to the Illinois EPA for affected units stating the following: the dates any necessary control measures were not implemented; a listing of those control measures; the reasons that the control measures were not implemented; and any corrective actions taken. This information includes, but is not limited to, those dates when controls were not applied based on a belief that application of such control measures would have been unreasonable given prevailing atmospheric conditions. This report shall be submitted to the Illinois EPA no later than 45 calendar days from the end of each calendar quarter.

SECTION 3: TRADING PROGRAM CONDITIONS

CONDITION 3.1: ACID RAIN PROGRAM REQUIREMENTS

a. Applicability

Under Title IV of the federal Clean Air Act, Acid Deposition Control, this plant or source is an affected source and the following emission units at the source are affected units for acid deposition:

Boilers 1 and 2

Note: Title IV of the Clean Air Act, and other laws and regulations promulgated thereunder, establish requirements for affected sources related to control of emissions of pollutants that contribute to acid rain, i.e., SO₂ and NO_x. For purposes of this permit, these requirements are referred to as Title IV provisions.

b. Applicable Emission Requirements

The owners and operators of the source shall not violate applicable Title IV provisions. In particular:

- i. SO₂ emissions from the affected units shall not exceed any allowances that the source lawfully holds under Title IV provisions. [Environmental Protection Act, Sections 39.5(7)(g) and (17)(1)]

Note: Affected sources must hold SO₂ allowances to account for the SO₂ emissions from affected units at the source that are subject to Title IV provisions. Each allowance is a limited authorization to emit up to one ton of SO₂ emissions during or after a specified calendar year. The possession of allowances does not authorize exceedances of applicable emission standards or violations of the SO₂ ambient air quality standards.

- ii. NO_x emissions from each affected unit shall not exceed the applicable emission standard pursuant to 40 CFR Part 76.

c. Monitoring, Recordkeeping and Reporting

The owners and operators of the source and, to the extent applicable, their designated representative, shall comply with applicable requirements for monitoring, recordkeeping and reporting specified by Title IV provisions, including 40 CFR Part 75. [Environmental Protection Act, Sections 39.5(7)(b) and 17(m)]

Note: As already addressed in Condition 2.1.9, the following emission determination methods will be used for the affected units at this source.

NO _x :	Continuous Emissions Monitoring (40 CFR 75.12)
SO ₂ :	Continuous Emissions Monitoring (40 CFR 75.11)
Opacity:	Continuous Monitoring (40 CFR 75.14)
O ₂ /CO ₂ :	Continuous Monitoring for Oxygen or Carbon Dioxide (40 CFR Part 75.13)

d. Acid Rain Permit

The owners and operators of the source shall comply with the terms and conditions of the source's Acid Rain permit. (Environmental Protection Act, Section 39.5(17)(1))

Note: The source is subject to an Acid Rain permit, which was issued pursuant to Title IV provisions, including Section 39.5(17) of the Environmental Protection Act. Affected sources must be operated in compliance with their Acid Rain permits. A copy of the initial Acid Rain permit is included as an attachment to this permit. Revisions and modifications of this Acid Rain permit, including administrative amendments and automatic amendments (pursuant to Sections 408(b) and 403(d) of the CAA or regulations thereunder) are governed by Title IV provisions, as provided by Section 39.5(13)(e) of the Environmental Protection Act, and revision or renewal of the Acid Rain permit may be handled separately from this permit.

e. Coordination with Other Requirements

- i. This permit does not contain any conditions that are intended to interfere with or modify the requirements of Title IV provisions. In particular, this permit does not restrict the flexibility under Title IV provisions of the owners and operators of this source to amend their Acid Rain compliance plan. [Environmental Protection Act, Section 39.5(17)(h)]
- ii. Where another applicable requirement of this permit is more stringent than an applicable requirement of Title IV provisions, both requirements are enforceable and the owners and operators of the source shall comply with both requirements. [Environmental Protection Act, Section 39.5(7)(h)]

CONDITION 3.2: NO_x TRADING PROGRAMa. Description of NO_x Trading Program

The NO_x Trading Program is a regional "cap and trade" market system for large sources of NO_x emissions in the eastern United States, including Illinois. It is designed to reduce and maintain NO_x emissions from the emission units covered by the program within a budget in order to contribute to attainment and maintenance of the ozone ambient air quality standard in the multi-state region covered by this program, as required by Section 110 of the CAA. The NO_x Trading Program applies in addition to other applicable requirements for NO_x emissions and in no way relaxes these other requirements.

An electrical generating unit (EGU) that is subject to the NO_x Trading Program is referred to as a "budget EGU." Sources that have one or more EGU or other units subject to the NO_x Trading Program are referred to as budget sources.

The NO_x Trading Program controls NO_x emissions from budget EGUs and other budget units during a seasonal control period from May 1 through September 30 of each year, when weather conditions are conducive to formation of ozone in the ambient air. By November 30 of each year, the allowance transfer deadline, each budget source must hold "NO_x allowances" for the actual NO_x emissions of its budget units during the preceding control period. The USEPA will then retire NO_x allowances in the source's accounts in amounts equivalent to its seasonal emissions. If a source does not have sufficient allowances in its accounts, USEPA would subtract allowances from the source's future allocation for the next control period and impose other penalties as appropriate. Stringent monitoring procedures developed by USEPA apply to budget units to assure that NO_x emissions are accurately determined.

The number of NO_x allowances available for budget sources is set by the overall budget for NO_x emissions established by USEPA. This budget requires a substantial reduction in NO_x emissions from historical levels as necessary to meet air quality goals. In Illinois, existing budget sources initially receive their allocation or share of the NO_x allowances budgeted for EGUs in an amount determined by rule [35 IAC Part 217, Appendix F]. Between 2007 and 2011, the allocation mechanism for existing EGUs gradually shifts to one based on the actual utilization of EGU in preceding control periods. New budget EGUs, for which limited utilization data may be available, may obtain NO_x allowances from the new source set-aside (NSSA), a portion of the overall budget reserved for new EGUs.

In addition to directly receiving or purchasing NO_x allowances as described above, budget sources may transfer NO_x allowances from one of their units to another. They may also purchase allowances in the marketplace from other sources that are willing to sell allowances that they have received. Each budget source must designate an account representative to handle all its allowance transactions. The USEPA, in a central, national system, maintains allowance accounts and record transfer of allowances among accounts.

The ability of sources to transfer allowances serves to minimize the costs of reducing NO_x emissions from budget units to comply with the overall NO_x budget. In particular, the NO_x emissions of budget units that may be most economically controlled will be targeted by sources for further control of emissions. This will result in a surplus of NO_x allowances from those units that can be transferred to other units at which it is more difficult to control NO_x emissions. Experience with reduction of SO₂ emissions under the federal Acid Rain program has shown that this type of trading program not only achieves regional emission reductions in a more cost-effective manner, but also results in greater overall reductions than application of traditional emission standards to individual emission units.

The USEPA developed the plan for the NO_x Trading Program with assistance from affected states. Illinois rules for the NO_x Trading Program for EGUs are located in 35 IAC Part 217, Subpart W and have been approved by the USEPA. These rules provide for interstate trading, as mandated by Section 9.9 of the Environmental Protection Act. Accordingly, these rules refer to and rely upon federal rules at 40 CFR Part 96, which have been developed by USEPA for certain aspects of the NO_x Trading Program, and which an individual state must follow to allow for interstate trading of NO_x allowances.

Note: This narrative description of the NO_x Trading Program is for informational purposes only and is not enforceable.

b. Applicability

The following emission units at this source are budget EGUs for purposes of the NO_x Trading Program. Accordingly, this source is a budget source and the Permittee is the owner or operator of a budget source and budget EGU. In this condition, these emission units are addressed as budget EGU.

Boiler 1
Boiler 2

c. General Provisions of the NO_x Trading Program

- i. This source and the budget EGUs at this source shall comply with all applicable requirements of Illinois' NO_x Trading Program, i.e., 35 IAC Part 217, Subpart W, and 40 CFR Part 96 (excluding 40 CFR 96.4 (b) and 96.55 (c), and excluding 40 CFR 96, Subparts C, E and I), pursuant to 35 IAC 217.756(a) and 217.756(f)(2).
- ii. Any provision of the NO_x Trading Program that applies to a budget source (including any provision applicable to the account representative of a budget source) shall also apply to the owner or operator of such budget sources and to the owner and operator of each budget EGU at the source, pursuant to 35 IAC 217.756(f)(3).

- iii. Any provision of the NO_x Trading Program that applies to a budget EGU (including any provision applicable to the account representative of a budget EGU) shall also apply to the owner and operator of such budget EGU, pursuant to 35 IAC 217.756(f)(4).

d. Requirements for NO_x Allowances

- i. By November 30 of each year, the allowance transfer deadline, the account representative of each budget EGU at this source shall hold allowances available for compliance deduction under 40 CFR 96.54 in the budget EGUs compliance account or the source's overdraft account in an amount that shall not be less than the budget EGUs total tons of NO_x emissions for the preceding control period, rounded to the nearest whole ton, as determined in accordance with 40 CFR 96, Subpart H, plus any number necessary to account for actual utilization (e.g., for testing, start-up, malfunction, and shutdown under 40 CFR 96.42(e) for the control period, pursuant to 35 IAC 217.756(d)(1)). For purposes of this requirement, an allowance may not be utilized for a control period in a year prior to the year for which the allowance is allocated, pursuant to 35 IAC 217.756(d)(5).
- ii. The account representative of a budget EGU that has excess emissions in any control period, i.e., NO_x emissions in excess of the number of NO_x allowances held as provided above, shall surrender the allowances as required for deduction under 40 CFR 96.54(d)(1), pursuant to 35 IAC 217.756(f)(5). In addition, the owner or operator of a budget EGU that has excess emissions shall pay any fine, penalty, or assessment, or comply with any other remedy imposed under 40 CFR 96.54(d)(3) and the Environmental Protection Act, pursuant to 35 IAC 217.756(f)(6). Each ton of NO_x emitted in excess of the number of NO_x allowances held as provided above for each budget EGU for each control period shall constitute a separate violation of 35 IAC Part 217 and the Environmental Protection Act, pursuant to 35 IAC 217.756(d)(2).
- iii. An allowance allocated by the Illinois EPA or USEPA under the NO_x Trading Program is a limited authorization to emit one ton of NO_x in accordance with the NO_x Trading Program. As explained by 35 IAC 217.756(d)(6), no provision of the NO_x Trading Program, the budget permit application, the budget permit, or a retired unit exemption under 40 CFR 96.5 and no provision of law shall be construed to limit the authority of the United States or the State of Illinois to terminate or limit this authorization. As further explained by 35 IAC 217.756(d)(7), an allowance allocated by the Illinois EPA or USEPA under the NO_x Trading Program does not constitute a property right. As provided by 35 IAC 217.756(c)(4), allowances shall be held, deducted from, or transferred among allowance accounts in accordance with 35 IAC Part 217, Subpart W, and 40 CFR 96, Subparts F and G.

e. Monitoring Requirements for Budget EGUs

- i. The Permittee shall comply with the monitoring requirements of 40 CFR Part 96, Subpart H, for each budget EGU and the compliance of each budget EGU with the emission limitation under Condition 3 (d)(i) shall be determined by the emission measurements recorded and reported in accordance with 40 CFR 96, Subpart H, pursuant to 35 IAC 217.756(c)(1), (c)(2) and (d)(3).
- ii. The account representative for the source and each budget EGU at the source shall comply with those sections of the monitoring requirements of 40 CFR 96, Subpart H, applicable to an account representative, pursuant to 35 IAC 217.756(c)(1) and (d)(3).

f. Recordkeeping Requirements for Budget EGUs

Unless otherwise provided below, the Permittee shall keep on site at the source each of the following documents for a period of at least five years from the date the document is created. This period may be extended for cause at any time prior to the end of the five years, in writing by the Illinois EPA or the USEPA (35 IAC 217.756(e)(1)).

- i. The account certificate of representation of the account representative for the source and each budget EGU at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 40 CFR 96.13, as provided by 35 IAC 217.756 (e)(1)(A). These certificates and documents must be retained on site at the source for at least five years after they are superseded because of the submission of a new account certificate of representation changing the account representative.
- ii. All emissions monitoring information, in accordance with 40 CFR 96, Subpart H, (provided that to the extent that 40 CFR 96, Subpart H, provides for a three year period for retaining records, the three year period shall apply,) pursuant to 35 IAC 217.756(e)(1)(B).
- iii. Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_x Trading Program or documents necessary to demonstrate compliance with requirements of the NO_x Trading Program, pursuant to 35 IAC 217.756(e)(1)(C).
- iv. Copies of all documents used to complete a budget permit application and any other submission under the NO_x Trading Program, pursuant to 35 IAC 217.756(e)(1)(D).

g. Reporting Requirements for Budget EGUs

- i. The account representative for this source and each budget EGU at this source shall submit to the Illinois EPA and USEPA the reports and compliance certifications required under the NO_x Trading Program, including those under 40 CFR 96, Subparts D and H and 35 IAC 217.774, pursuant to 35 IAC 217.756(e)(2).

- ii. These submittals need only be signed by the designated representative, who may serve in place of the responsible official for this purpose as provided by Section 39.5(1) of the Environmental Protection Act, and submittals to the Illinois EPA need only be made to the Illinois EPA, Air Compliance Section.

h. Allocation of NO_x Allowances to Budget EGUs

- i. For the first four control periods that a budget EGU identified in Condition 3.2(b) operates, it will not be entitled to direct allocations of NO_x allowances because the EGU will be considered a "new" budget EGU, as defined in 35 IAC 217.768(a)(1).
- ii. A. After the first four control periods, as addressed above, the budget EGU will cease to be "new" budget EGU and the source will be entitled to an allocation of NO_x allowances for the budget EGU as provided in 35 IAC 217.764. For example, for 2010, the allocation of NO_x allowances will be governed by 35 IAC 217.764(e)(2) and (b)(4).
- B. In accordance with 35 IAC 217.762, the theoretical number of NO_x allowances for these budget EGUs, calculated as the product of the applicable NO_x emissions rate and heat input, as follows, shall be the basis for determining the allocation of NO_x allowances to these EGUs:
 - 1. As provided by 35 IAC 217.762(a)(2), the applicable NO_x emission rates for these EGUs is 0.07 lb/million Btu. This is the permitted emission rates for these EGUs as contained in Condition 2.1.2(b)(iii). The permitted NO_x emission rate is the applicable rate because it is between 0.15 lb/million Btu and 0.055 lb/million Btu, as provided by 35 IAC 217.762(a)(2).
 - 2. The applicable heat input (million Btu/control period) shall be the average of the two highest heat inputs from the control periods four to six years prior to the year for which the allocation is being made, as provided by 35 IAC 217.762(b)(1).

j. Eligibility for NO_x Allowances from the New Source Set-Aside (NSSA)

The Permittee is eligible to obtain NO_x allowances for the budget EGU identified in Condition 3.2(b) from the NSSA, as provided by 35 IAC 217.768, because the budget EGU are "new" budget EGU.

k. Eligibility for Early Reduction Credits

The Permittee is not eligible to request NO_x allowances for the budget EGU identified in Condition 3.2(b) for any early reductions in NO_x emissions, as provided by 35 IAC 217.770.

1. Budget Permit Required by the NO_x Trading Program

- i. For this source, this condition of this permit, i.e., Condition 3.2, is the Budget Permit required by the NO_x Trading Program and is intended to contain federally enforceable conditions addressing all applicable NO_x Trading Program requirements. This Budget Permit shall be treated as a complete and segregable portion of this permit, as provided by 35 IAC 217.758(a)(2).
- ii. The Permittee and any other owner or operator of this source and each budget EGU at the source shall operate the budget EGU in compliance with this Budget Permit, pursuant to 35 IAC 217.756(b)(2).
- iii. No provision of this Budget Permit or the associated application shall be construed as exempting or excluding the Permittee, or other owner or operator and, to the extent applicable, the account representative of a budget source or budget EGU from compliance with any other regulation or requirement promulgated under the Clean Air Act, the Environmental Protection Act, the approved State Implementation Plan, or other federally enforceable permit, pursuant to 35 IAC 217.756(g).
- iv. Upon recordation by USEPA, under 40 CFR 96, Subparts F or G, or 35 IAC 217.782, every allocation, transfer, or deduction of an allowance to or from the budget EGUs' compliance accounts or to or from the overdraft account for the budget source is deemed to amend automatically, and become part of, this budget permit, pursuant to 35 IAC 217.756(d)(8). This automatic amendment of this budget permit shall be deemed an operation of law and will not require any further review.
- v. No revision of this Budget Permit shall excuse any violation of the requirements of the NO_x Trading Program that occurs prior to the date that the revision to this permit takes effect, pursuant to 35 IAC 217.756(f)(1).
- vi. The Permittee, or other owner or operator of the source, shall reapply for a Budget Permit for the source as required by 35 IAC Part 217, Subpart W and Section 39.5 of the Act. For purposes of the NO_x Trading Program, the application shall contain the information specified by 35 IAC 217.758(b)(2).

SECTION 4: GENERAL PERMIT CONDITIONS

CONDITION 4.1: STANDARD CONDITIONS

Standard conditions for issuance of construction permits, attached hereto and incorporated herein by reference, shall apply to this project, unless superseded by other conditions in the permit.

CONDITION 4.2: GENERAL REQUIREMENTS FOR EMISSION TESTING

- a.
 - i. At least 60 days prior to the actual date of initial emission testing required by this permit, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing and shall include at a minimum:
 - A. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - B. The specific conditions, e.g., operating rate and control device operating conditions, under which testing shall be performed including a discussion of why these conditions will be representative and the means by which the operating parameters will be determined.
 - C. The specific determinations of emissions that are intended to be made, including sampling and monitoring locations. As part of this plan, the Permittee may set forth a strategy for performing emission testing in the normal load range of the boiler.
 - D. The test method(s) that will be used, with the specific analysis method if the method can be used with different analysis methods.
 - ii. As provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for subsequent emissions testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below, contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).
- b.
 - i. The Permittee shall notify the Illinois EPA prior to performing emissions testing required by this permit to enable the Illinois EPA to observe the tests. Notification for the expected date of testing shall be submitted a minimum of 30 days* prior to the expected date, and identify the testing that will be performed. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days* prior to the actual date of testing.

- * For a particular test, the Illinois EPA may at its discretion accept shorter advance notification provided that it does not interfere with the Illinois EPA's ability to observe testing.

- ii. This notification shall also identify the parties that will be performing testing and the set or sets of operating conditions under which testing will be performed.

c. Three copies of the Final Reports for emission tests shall be forwarded to the Illinois EPA within 30 days after the test results are compiled and finalized but not later than 90 days after the date of testing. At a minimum, the Final Report for testing shall contain:

- i. General information, i.e., testing personnel and test dates;
- ii. A summary of results;
- iii. Description of test method(s), including a description of sampling points, sampling train, analysis equipment, and test schedule;
- iv. The operating conditions of the emission unit and associated control devices during testing; and
- v. Data and calculations, including copies of all raw data sheets and records of laboratory analysis, sample calculations, and data on equipment calibration.

CONDITION 4.3: REQUIREMENTS FOR RECORDS FOR DEVIATIONS

Except as specified in a particular provision of this permit or in a subsequent CAAPP Permit for the plant, records for deviations from applicable emission standards and control requirements shall include at least the following information: the date, time and estimated duration of the event; a description of the event; the manner in which the event was identified, if not readily apparent; the probable cause for deviation, if known, including a description of any equipment malfunction/breakdown associated with the event; information on the magnitude of the deviation, including actual emissions or performance in terms of the applicable standard if measured or readily estimated; confirmation that standard procedures were followed or a description of any event-specific corrective actions taken; and a description of any preventative measures taken to prevent future occurrences, if appropriate.

CONDITION 4.4: RETENTION AND AVAILABILITY OF RECORDS

Except as specified in a particular provision of this permit or in a subsequent CAAPP Permit for the plant, all records, including written procedures and logs, required by this permit shall be kept at a readily accessible location at the plant and be available for inspection and copying by the Illinois EPA and shall be retained for at least five years.

CONDITION 4.5: NOTIFICATION AND REPORTING OF DEVIATIONS

Except as specified in a particular provision of this permit or in a subsequent CAAPP Permit for the plant, notifications and reports for deviation from applicable emission standards and control requirements shall include at least the following information: the date and time of the event, a description of the event, information on the magnitude of the deviation, a description of the corrective measures taken, and a description of any preventative measures taken to prevent future occurrences.

CONDITION 4.6: GENERAL REQUIREMENTS FOR NOTIFICATION AND REPORTS

- a.
 - i. Unless otherwise specified in the particular provision of this permit or in the written instructions distributed by the Illinois EPA for particular reports, reports and notifications shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.
 - ii. As of the date of issuance of this permit, the addresses of the office that should generally be utilized for the submittal of reports and notifications are as follows:
 - A. Illinois EPA - Air Compliance Section

Illinois Environmental Protection Agency
Bureau of Air
Compliance and Enforcement Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276
 - B. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency
Division of Air Pollution Control
2009 Mall Street
Collinsville, Illinois 62234
 - C. USEPA Region 5 - Air Branch

USEPA (AE-17J)
Air and Radiation Division
77 West Jackson Boulevard
Chicago, Illinois 60604
- b. The Permittee shall submit Annual Emission Reports to the Illinois EPA in accordance with 35 IAC Part 254. For hazardous air pollutants, these reports shall include emissions information for at least the following pollutants: hydrogen chloride, hydrogen fluoride, mercury, arsenic, beryllium, cadmium, chromium, lead, manganese, and nickel.

ATTACHMENTSATTACHMENT 1: TABLES

Table I

Emission Limitations for Coal-Fired Boilers

Pollutant	Individual Boiler			Combined Tons/Year ^b
	Lb/Million Btu ^a	Lb/Hour	Tons/Year ^b	
NO _x	0.07	893, 24-Hour Average ^c	2,282	4,564
CO	0.12 ^d	893, 24-Hour Average	3,912	7,824
VOM	0.004	29.8, 3-Hour Average	130	260
SO ₂	0.182	3,126, 24-Hour Average ^e	5,933	11,866
PM/PM ₁₀ Filterable ^f	0.015	112, 3-Hour Average	490	980
PM ₁₀ Total	0.035 ^g	261, 3-Hour Average ^h	1,143 ^h	2,286 ^h
Sulfuric Acid Mist	0.005	37.1, 3 Hour Average	162.5	325
Fluorides ⁱ	0.00026	2.0, 3-Hour Average	8.75	17.5
Lead ^j	----	0.0678, 3-Hour Average	0.295	0.594
Mercury	----	0.016, 3-Hour Average ^k	0.07	0.14
Beryllium	----	0.0085, 3-Hour Average ^k	0.0371	0.0742
Hydrogen Chloride	----	24.4, 3-Hour Average ^k	107.0	214.0

Notes:

- ^a Compliance with the emission rates expressed in pound/million Btu heat input shall be determined in accordance with the provisions in Condition 2.1.2(b).
- ^b These limitations address all emissions from the boiler(s), including emissions that occur during periods of startup, shutdown and malfunction addressed by Condition 2.1.6.
- ^c This limitation does not apply during startup and shutdown. The emissions of NO_x from the boilers during such periods are addressed by the BACT limit for NO_x, which applies as a 30-day average.
- ^d This emission rate does not apply for startup or shutdown of a boiler. The emissions of CO from a boiler during such periods are addressed by a limitation expressed in pounds/hour, 24-hour average basis, which is the product of the design capacity of the boiler, in million Btu/hr, and the otherwise applicable BACT limit in lb/million Btu.
- ^e This limitation is reduced to 2,450 lb/hour, daily average, no later than 24 months after initial startup of a boiler, pursuant to Condition 2.1.7(a)(i), and emissions may also be further restricted, pursuant to Condition 2.1.16, Optimization of Daily Control of SO₂ Emissions.
- ^f All particulate matter (PM) measured by USEPA Method 5 shall be considered PM₁₀ unless PM emissions are tested by USEPA Method 201 or 201A, as specified in 35 IAC 212.108(a). These PM limits do not address condensable particulate matter.

This limit, which addresses both filterable and condensable PM_{10} , is subject to reduction pursuant to Condition 2.1.17, Revision of Total PM_{10} Emission Limit Based on Results of Emission Testing.

If the limit for total PM_{10} emissions is reduced pursuant to Condition 2.1.17, this limitation shall also be reduced on a pro-rata basis.

The limit for fluorides is expressed in terms of hydrogen fluorides.

The limit for lead is expressed in terms of elemental lead. As this limit is applicable during startup, shutdown and malfunction, compliance shall be determined by engineering analysis and calculations.

This limit does not apply during periods of startup, shutdown and malfunction, as addressed by Condition 1.4.

TABLE II

**Particulate Matter (PM) Emission Limitations for Bulk Material Operations
(Pounds per Hour and Tons per Year)**

Emission Units	Application Designation	Pounds/Hour	Tons/Year
Coal/Limestone Receiving & Handling and Coal Preparation			
Conveyor Unloading, Transfer House, Crusher Building, Hoppers, etc., except as below	EP1, EP2, EP16B, EP41B, EP44, EP45, EP48, EP49, EP50B, EP102, EP105	0.479	2.10
Limestone Reclaim	EP17, EP39	0.156	0.68
Material Storage	EP40A, EP40B, EP40c, EP58, EP 62, EP103	3.411	14.95
Subtotal		4.046	17.73
Limestone Preparation			
Preparation Equipment, Mill System and Bins	EP75A, EP75B	0.002	0.01
Subtotal		0.002	0.01
Waste and Ash Handling and Loadout			
Bottom Ash Silos, Transport Systems, Fly Ash Silos, Waste Bin, Etc.	EP14, EP78, EP80, EP107	0.154	0.67
Subtotal		0.154	0.67
Total		4.202	18.4

ATTACHMENT 2: STANDARD PERMIT CONDITIONSSTANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS
ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.
2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act and Regulations adopted by the Illinois Pollution Control Board.
3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Illinois EPA and a supplemental written permit issued.
4. The Permittee shall allow any duly authorized agent of the Illinois EPA upon the presentation of credentials, at reasonable times:
 - a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
 - b. To have access to and to copy any records required to be kept under the terms and conditions of this permit,
 - c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,
 - d. To obtain and remove samples of any discharge or emissions of pollutants, and
 - e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:
 - a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,
 - b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities.
 - c. Does not release the Permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations.
 - d. Does not take into consideration or attest to the structural stability of any units or parts of the project, and
 - e. In no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
- 6a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Illinois EPA before the equipment covered by this permit is placed into operation.
- b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.
7. The Illinois EPA may file a complaint with the Board for modification, suspension or revocation of a permit.
 - a. Upon discovery that the permit application contained misrepresentations, misinformation or false statement or that all relevant facts were not disclosed, or
 - b. Upon finding that any standard or special conditions have been violated, or
 - c. Upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

ATTACHMENT 3: ACID RAIN PERMIT

217-782-2113

ACID RAIN PROGRAM PERMIT

Prairie State Generating Company, LLC
Attn: Mr. Lars W. Scott, Designated Representative
701 Market Street, Suite 781
St. Louis, Missouri 63010

Oris No.: 55856
Illinois EPA I.D. No.: 189808AAB
Source/Unit: Prairie State Generating Company, LLC,
Units 01 and 02
Date Received: October 11, 2002
Date Issued: January 14, 2005
Effective Date: January 1, 2007
Expiration Date: December 31, 2011

STATEMENT OF BASIS:

In accordance with Section 39.5(17)(b) of the Illinois Environmental Protection Act and Titles IV and V of the Clean Air Act, the Illinois Environmental Protection Agency is issuing this Acid Rain Program permit for the Prairie State Generating Station.

SULFUR DIOXIDE (SO₂) ALLOCATIONS AND NITROGEN OXIDE (NO_x) REQUIREMENTS FOR EACH AFFECTED UNIT:

Unit 01 and Unit 02	SO ₂ Allowances	These units are not entitled to an allocation of SO ₂ allowances pursuant to 40 CFR Part 73.
	NO _x Emission Limitation	These units are subject to a NO _x emissions limitation under 40 CFR Part 76.

This Acid Rain Program permit contains provisions related to sulfur dioxide (SO₂) emissions and requires the owners and operators to hold SO₂ allowances to account for SO₂ emissions beginning in the year 2000. An allowance is a limited authorization to emit up to one ton of SO₂ during or after a specified calendar year. Although this plant is not eligible for an allowance allocated by USEPA, the owners or operators may obtain SO₂ allowances to cover emissions from other sources under a marketable allowance program. The transfer of allowances to and from a unit account does not necessitate a revision to this permit (See 40 CFR 72.84).

This permit contains provisions related to nitrogen oxide (NO_x) emissions requiring the owners or operators to monitor NO_x emissions from affected units in accordance with the applicable provisions of 40 CFR Part 75.

This Acid Rain Program permit does not authorize the construction and operation of the affected units as such matters are addressed by Titles I and V of the Clean Air Act. If the construction and operation of one of the affected units is not undertaken, this permit shall not cover such unit.

In addition, notwithstanding the effective date of this permit as specified above, this permit shall not take effect for an individual affected unit until January 1 of the year in which the unit commences operation.

COMMENTS, NOTES AND JUSTIFICATIONS:

This permit does not affect the owners and operators responsibility to meet all other applicable local, state, and federal requirements, including requirements addressing SO₂ and NO_x emissions.

PERMIT APPLICATION:

The SO₂ allowance requirements and other standard requirements as set forth in the application are incorporated by reference into this permit. The owners and operators of this source must comply with the standard requirements and special provisions set forth in the application.

If you have any questions regarding this permit, please contact Shashi Shah at 217/782-2113.

ORIGINAL SIGNED BY DONALD E. SUTTON

Donald E. Sutton, P.E.
Manager, Permits Section
Division of Air Pollution Control

DES:SRS:jar

cc: Cecilia Mijares, USEPA Region V
Illinois EPA Region 3

ATTACHMENT 4:**DETERMINING THE SORBENT INJECTION RATE FOR CONTROL OF MERCURY EMISSIONS FROM
THE COAL-FIRED BOILERS****1. Purpose**

This attachment contains the requirements for the sorbent injection systems for control of mercury emissions from the coal-fired boilers if the boilers are subject to Condition 2.1.2(c)(ii)(A) and the Permittee elects to comply with Permit Option B, i.e., use of a control system for mercury emissions. Among other matters, this attachment defines the process by which the applicable injection rate of sorbent for such systems will be determined. These requirements are included as an attachment to this permit, rather than in the body of the permit, due to the detailed nature of the requirements and the likelihood that these requirements will never take effect, as the emissions of mercury from the coal-fired boiler are subject to requirements adopted by USEPA pursuant to the Clean Air Act.

2. General Requirements

- a. The sorbent injection systems, including the selected sorbent(s) shall be designed, constructed and maintained in accordance with good air pollution control practices. For this purpose, sorbent(s) shall be used, such as treated activated carbon, that have been demonstrated to have high levels of effectiveness in similar boiler/control device applications (or pilot tests on an affected boiler). The systems shall have ample capacity to handle and inject such sorbent(s), and the location, number and type of injection ports designed for effective distribution of sorbent in the flue gas. The Permittee shall submit a demonstration to the Illinois EPA showing that the proposed sorbent injection systems meet these criteria, for review and approval by the Illinois EPA.
- b.
 - i. The sorbent injection systems shall each be operated to inject sorbent at a rate, in lb/million Btu or lb/scf of flue gas, that is at least at the rate that has been determined to represent the maximum practicable degree of removal for mercury, as previously established pursuant to an evaluation of the effectiveness of the sorbent for control of mercury conducted in accordance with Condition 3 or 4, below. This rate shall be maintained while coal is being fired in the boiler, including periods of startup and shutdown of the boiler.
 - ii. Notwithstanding the above, for purposes of evaluating the performance of sorbent(s), the Permittee may operate without the sorbent injection system in service or at low rates of sorbent injection as necessary to (1) to prepare for the formal evaluation of a sorbent, i.e., flushing residual sorbent from the boiler and control train, and (2) determine the "performance curve", provided that the number and duration of such operation is minimized to the extent reasonably

necessary for this purpose. (Refer to Paragraph 5(a), below, for the definition of the performance curve.) The Permittee may also conduct pilot tests to confirm suitability of a potential sorbent prior to a detailed evaluation, with prior notification to the Illinois EPA describing such tests and the available data indicating the suitability of the sorbent material for effective control of mercury.

3. Initial Evaluation of the Effectiveness of Sorbent Injection and Establishment of the Optimum Sorbent Injection Rate

- a. The Permittee shall perform an evaluation of the effectiveness of injecting sorbent(s) for control of mercury in accordance with a plan submitted to the Illinois EPA for review and comment.
 - i. The Permittee shall submit the initial plan to the Illinois EPA no later than 180 days after initial start-up of a boiler.
 - ii. The Permittee shall promptly begin this evaluation after a boiler demonstrates compliance with all applicable short-term emission limits as shown by emission testing and monitoring. At this time, the Permittee shall submit an update to the plan that describes its findings with respect to control of mercury emissions during the shakedown of the boilers, which highlights possible areas of interest for this evaluation.
 - iii. This evaluation shall be completed and a detailed written report submitted to the Illinois EPA within two years after the initial startup of a boiler. This report shall include proposed injection rate limit(s) for mercury emissions. (See Condition 3(d)(i), below.)
 - iv. This deadline may be extended by the Illinois EPA for an additional year if the Permittee submits an interim report (1) demonstrating the need for additional data to effectively evaluate sorbent injection and (2) includes an interim limit for mercury injection that provides effective control of mercury.
- b.
 - i. If the Permittee is conducting monitoring for mercury emissions with a continuous method, the plan shall provide for systematic review of mercury emissions as related to variation in operation of the boiler, within the normal range of boiler operation, including the effect of (1) boiler load and combustion settings, including excess oxygen, (2) operating data for the SCR system, including the level of uncontrolled NO_x before the SCR, as predicted from boiler operating data, (3) operating data for the scrubber, including pH of the scrubbant, and (4) operating data for the wet WESP. As an alternative to reliance on the measurements from a continuous monitoring system, the Permittee may also supplement its monitoring with semi-continuous monitoring, as provided below.

- ii. If the Permittee is conducting monitoring for mercury emissions with a semi-continuous method, the sampling periods shall be of an appropriate duration to cover a representative selection of operation of the boiler.
 - c. In conjunction with such measurements of mercury emissions, the Permittee shall sample and analyze the fuel supply to the boiler so that representative data for the mercury content of the fuel supply is available that correlates with emission measurements.
 - d.
 - i. Unless the Permittee elects to conduct a supplementary investigation, as provided below, the maximum practicable degree of removal shall be injection of sorbent at a rate that is twice the rate at the "transition point" from the performance curve. (Refer to Paragraph 5(b), below, for the definition of the transition point.) The sorbent injection systems shall be operated at this rate.
 - ii. The Permittee may elect to conduct a supplemental investigation of the effectiveness of injection of sorbent(s) to determine whether effective control of mercury, as generally required, is achieved with lower (or higher) injection rates considering the operating rate or other relevant operating parameters of the boilers or control train, excluding periods of startup and shutdown of boilers. For this purpose, the Permittee shall conduct additional measurements and develop additional performance curves for the control of mercury emissions for the boilers under such operating conditions. In the report for the evaluation, the Permittee shall explain why such operating conditions affect the control of mercury emissions, provide the criteria for identification of such operating conditions, and identify the rates at which the sorbent injection system must be operated during such conditions, determined as twice the rate at the "transition point" on the applicable performance curve.
4. Subsequent Evaluation of the Effectiveness of Sorbent Injection and Adjustment of the Optimum Sorbent Injection Rate
- a. The Permittee shall repeat the evaluation described in Condition 3, above, in the following circumstances:
 - i. If the initial evaluation of sorbent injection does not demonstrate that 90 percent or more overall control of mercury will be achieved, a new evaluation shall be commenced two years after the initial evaluation was completed.
 - ii. If the Permittee undertakes significant changes to the mercury control system, e.g., use of a different sorbent or changes in the location or type of injection ports, at the conclusion of such changes.

- iii. If the Permittee undertakes significant changes to other devices in the control train, e.g., use of a different catalyst in the SCR or changes in the chemistry of the scrubber which would generally act to reduce the effectiveness of those devices in controlling or facilitating the control of mercury emissions, at the conclusion of such changes.
 - iv. If requested by the Illinois EPA for purposes of periodic confirmation of the effectiveness of sorbent injection, which request shall not be made more than once every five years.
 - v. If the Permittee elects to perform such evaluation, provided, however that the Permittee shall explain why such an evaluation is being undertaken if it is less than two years after completion of the last evaluation.
- b. For the purpose of subsequent evaluation, the plan shall be submitted to the Illinois EPA for review and approval at least 45 days before undertaking changes that trigger the need to perform such an evaluation and the evaluation shall be completed in one year, with opportunity for a 6-month extension.
- c. As a subsequent evaluation reassesses the continuing operation of the boilers or addresses the future operation of the boilers, the results of the evaluation shall supersede the results of the preceding evaluation and thereafter govern the operation of the sorbent injection systems. For example, if the subsequent evaluation was performed for a new sorbent material and the boilers continue to be operated with such sorbent, operation shall be governed by the results of the subsequent evaluation. If the new sorbent will not continue to be used, operation shall be governed by the results of the preceding evaluation for the sorbent material that will be used.

5. Definition of Terms As Related to Sorbent Injection for Control of Mercury Emissions

For the purpose of these conditions, the following terms shall apply:

- a. The "performance curve" is a graphical representation of the effectiveness of a particular sorbent in controlling mercury emissions, comparing the effectiveness of control with increasing rates of sorbent injection.

A performance curve for injection of a particular sorbent material is established by conducting a series of tests under representative operating conditions of the boiler to measure mercury emissions at different rates of sorbent injection (typically starting from zero sorbent to high rates of sorbent injection). For the purpose of presenting data, mercury emissions and sorbent injection rates are expressed in terms of the heat input to the boiler, in million or trillion Btu. This accounts for any differences in the heat input during each test.

In conjunction with these measurements of mercury emissions, the coal supply to the boiler is analyzed for its mercury content. This allows the effect of the sorbent to be expressed in terms of control efficiency, calculated from the mercury emissions and the amount of mercury present in the coal entering the boiler. This also addresses any variation in the mercury content of the coal supply to the boiler, so that another potential cause for variation in emissions is directly accounted for. Otherwise, changes in emissions due to variation in mercury content of coal could not be accounted for and would be incorrectly assumed to be due to changes in the rate of sorbent. The resulting data for the relationship between control efficiency for mercury emissions and the sorbent injection rate is then portrayed in graphical form with a trendline that summarizes this relationship and the performance of the particular sorbent for control of emissions.

- b. The "transition point" is the theoretical point where the extensions of two straight lines on the performance curve for a particular sorbent, one representing the initial regime for control of mercury emissions and the other representing the terminal regime for control of emissions, would intersect. Effectively, the transition portion on the performance curve prepared from the evaluation of a particular sorbent is simplified to a single point, the "transition point."

In this regard, the performance curves for control of mercury emissions for different sorbent materials and boilers show a consistent form with two different regimes for control effectiveness, an initial regime and a terminal regime, separated by a transition. In the initial regime, there is a relatively strong effect for control of mercury with injection of sorbent. This appears on the left side of the graph, as the trendline starts from the edge of the graph for the level of control for mercury that is achieved without injection of any sorbent. In the terminal regime, there is a much weaker effect for control of mercury by additional injection of sorbent material. This appears on the right side of the graph, as a nearly flat or flat trendline starting from the left side of the graph. In the transition separating the two regimes, the effect of sorbent injection gradually shifts from one regime to the other. Such transitions on graphs of this form are commonly referred to as "shoulders," given the resemblance to a human shoulder.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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ROD R. BLAGOJEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/782-2113

CONSTRUCTION PERMIT - NSPS SOURCE - NESHAP SOURCE - PSD APPROVAL - REVISED

PERMITTEE

ExxonMobil Oil Corporation
Attn: Jeffrey L. Noga - Environmental Group Leader
Post Office Box 874
Joliet, Illinois 60434

NSPS/NESHAP

Application No.: 05030076
Applicant's Designation: CCUP
Subject: Crude/Coker Utilization Project
Date Issued: June 26, 2008
Location: I-55 & Arsenal Road, Channahon

I.D. No.: 197800AAADate Received: May 27, 2008

ILLINOIS DEPARTMENT OF RECORDS MANAGEMENT
OFFICE OF RECORDS
AUG 2 / 2012
REVIEWER JKS

This Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of the Crude/Coker Utilization Project (CCUP), that is, various changes to the refinery to improve the calendar day performance of existing equipment, as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

In conjunction with this permit, approval is given with respect to the federal regulations for Prevention of Significant Deterioration of Air Quality (PSD) for the above referenced project, as described in the application, in that the Illinois Environmental Protection Agency (Illinois EPA) finds that the application fulfills all applicable requirements of 40 CFR 52.21. This approval is issued pursuant to the federal Clean Air Act, as amended, 42 U.S.C. 7401 et. seq., the Federal regulations promulgated thereunder at 40 CFR 52.21 for Prevention of Significant Deterioration of Air Quality (PSD), and a Delegation of Authority agreement between the United States Environmental Protection Agency and the Illinois EPA for the administration of the PSD Program. This approval becomes effective in accordance with the provisions of 40 CFR 124.15 and may be appealed in accordance with the provisions of 40 CFR 124.19. This approval is also based upon and subject to the findings and conditions which follow:

Findings

1. ExxonMobil Oil Corporation has requested a permit to undertake a group of efficiency improvement and unit reliability projects that will allow the refinery to reduce operating costs and improve long-term daily average performance of existing equipment by more consistently approaching short-term design levels of throughput. The physical changes included as part of the project(s) are primarily to process equipment that do not have vents or stacks discharging emissions directly to the atmosphere, such as heat exchanger trains, pumps, etc. The changes being proposed will not change the design capacity of any existing units at the refinery. However, on an annual basis, throughput of several units is expected to increase above historical levels. The change in annual throughput at the Crude Unit will allow increases in throughput of downstream units and the resultant changes in emissions have been evaluated as part of this project.

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2. The ExxonMobil Refinery is located in an area designated nonattainment for ozone and $PM_{2.5}$. For purposes of regulating $PM_{2.5}$, PM_{10} will serve as a surrogate pollutant for $PM_{2.5}$.
- 3a. This project and the net emissions increase for the source exceeds 40 tons per year of nitrogen oxides (NO_x). The project is therefore subject to 35 IAC 203: Major Stationary Sources Construction and Modification (MSSCAM).
- b. This project also has potential emissions increases which are more than 40 tons/year of nitrogen oxides (NO_x), 100 tons/year of carbon monoxide (CO), 25 tons/year of particulate matter (PM), and 15 tons/year of particles with size equal to or smaller than 10 microns (PM_{10}). The project is therefore subject to PSD review as a major modification for NO_x , CO, PM and PM_{10} emissions.
- 4a. After reviewing all materials submitted by ExxonMobil, the Illinois EPA has determined that the project will comply with all applicable Board emissions standards.
- b.
 - i. As the units associated with this project which contribute to a significant increase in emissions do not undergo a physical change or change in the method of operation, these units are not subject to BACT or LAER. These units are further identified in Condition 1 of this Permit.
 - ii. The new components and storage tank(s) associated with the project emit only VOM. The VOM emissions generated by these units will not exceed the applicable significant threshold for VOM (40 tons).
 - iii. In addition to the emission units associated with this project not undergoing a physical change or change in the method of operation, there is no relaxation of any existing federally enforceable emission limits as a result of this project for said units.
5. The Illinois EPA has broadly considered alternatives to this project, as required by 35 IAC 203.306. This project will result in additional fuel produced with lower overall energy demand (fuel combustion/electric generation) on a per barrel basis without the addition of any new process emissions units. Accordingly, the benefits of the proposed project significantly outweigh its environmental and social costs.
6. Pursuant to 35 IAC 203.305, the Permittee has demonstrated that all major stationary sources which it owns or operates in Illinois are in compliance or on a schedule for compliance with all applicable state and federal air pollution control requirements, as further identified in Condition 1.2.5 of this permit.
7. A copy of the application and the Illinois EPA's review of the application and a draft of this permit was forwarded to a location in

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the vicinity of the plant, and the public was given notice and opportunity to examine this material, to submit comments, and to request and participate in a public hearing on this matter.

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1.0 OVERALL SOURCE CONDITIONS

1.1 Project Description

The Permittee is making changes to improve unit reliability, efficiency, and performance of existing units at the refinery, including the Crude Unit and downstream units. These proposed changes do not increase the design capacity of any existing unit at the refinery.

These projects will involve installation of piping and associated components. The potential exists for VOM emissions to occur from leaks associated with the flanges, valves, pumps, and other components associated with the piping. These fugitive emissions will be controlled by an existing leak detection and repair program.

All components associated with the CCUP Project that are in volatile organic compound service are also assumed to be "in organic hazardous air pollutant service" as defined in 40 CFR 63, Subpart CC.

The improved reliability/efficiency/performance will provide an increased average calendar day rate, resulting in a potential increase in emissions from existing units at the refinery. These units currently have sufficient capacity to handle the increased rates.

Additional control measures will also be added as part of this project to reduce emissions from existing asphalt material tanks (Tanks 231 and 232). Specifically, Tanks 231 and 232 will be controlled by asphalt vent packages.

1.2 Source-Wide Applicable Provisions and Regulations

1.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 2 (Unit-Specific Conditions for Specific Emission Units) of this permit.

1.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
- b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission

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units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

1.2.3 Operation of the CCR Regenerator Vent (2-D-89) during malfunction and breakdown may be allowed pursuant to 35 IAC 201, Subpart I as provided in the source's CAAPP permit.

1.2.4 Emissions Offsets

- a. i. The Permittee shall maintain 752.9 tons of NO_x emission offsets generated by other sources in the Chicago nonattainment area such that the total is 1.15 times the NO_x emissions allowed from this project.
- ii. The Permittee shall maintain 106.0 tons of PM₁₀ emission offsets generated by other sources in the Chicago nonattainment area such that the total is equal to the PM₁₀ emissions increase for this project.
- b. i. These NO_x and PM₁₀ emission reduction credits are provided by permanent emission reductions that occurred at the following source, as identified below. These emission reductions have been relied upon by the Illinois EPA to issue this permit and cannot be used as emission reduction credits for other purposes. The reductions at the source identified below have been made enforceable by the withdrawal of the air pollution control permits for the units generating the permanent emission reductions.

Midwest Generation - Collins Facility, Morris, I.D.
No. 063806AAF

Permanent Shutdown of Facility	753 tons/year NO _x
	106 tons/year PM ₁₀

- ii. If the Permittee proposes to rely upon emission offsets from another source, the Permittee shall apply for and obtain a revision to this permit prior to relying on such emission offsets, which application shall be accompanied by detailed documentation for the nature and amount of those alternative emission offsets.
- c. The acquisition of emission offsets shall be completed either 90 days after issuance of this Construction Permit or prior to commencement of construction of the CCUP Project, whichever occurs later, unless the Permittee requests an extension and it is approved by the IEPA.

Condition 1.2.4 represents the actions identified in conjunction with this project to ensure that the project is accompanied by emission offsets and does not interfere with reasonable further progress for PM_{2.5} and NO_x.

1.2.5 Compliance Schedules

The Permittee is subject to and shall take the actions required in the schedules of compliance established for the following emission units. These schedules may be adjusted through a revision of this permit in the event an unforeseen delay beyond the Permittee's control occurs. In addition, all other alleged non-compliance (with applicable state and federal air pollution control requirements) posed by the major stationary sources in Illinois that are owned, operated, or under the same common control as the Permittee are addressed in court orders or are addressed by compliance schedules in federally enforceable permits.

Compressor Environmental Upgrades - 40 CFR Part 63, Subpart CC.

- a. The Permittee shall achieve compliance with all applicable requirements of 40 CFR Part 63, Subpart CC for Compressors 19-G-3A/B no later than November 25, 2005 and 20-G-1A/B no later than December 22, 2005.
- b. The Permittee shall achieve compliance with all applicable requirements of 40 CFR Part 63, Subpart CC for Compressors 1-G-1A/B, 2-G-2A/B and 3-G-2A/B no later than May 31, 2006.

Note: The Permittee has submitted a permit application for the Compressor Environmental Upgrades required by 40 CFR Part 63 Subpart CC dated May 13, 2005.

Note: Pursuant to 35 IAC 203.305, the Permittee must demonstrate that it is in compliance, or on a schedule for compliance, with all applicable state and federal air pollution control requirements. As part of this application, the Permittee has proposed schedules of compliance for certain emission units, which are now made enforceable by this Condition. These schedules become effective upon issuance of this Construction Permit.

1.3 Source-Wide Non-Applicability of Regulations of Concern

1.3.1. Prevention of Significant Deterioration/NAA NSR

The Permittee has addressed the applicability and compliance of 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM). The limits established by this permit are intended to ensure that the project addressed in this construction permit does not constitute a major modification of

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the refinery pursuant to these rules for SO₂ and VOM emissions (See also Attachment 1 and 4a). For this purpose, this permit is issued based upon:

- a. A decrease of 5.9 tons of VOM emissions and 2,593 tons of SO₂ emissions attributable to the Coker Blowdown Recovery Project. The operational limitations of Construction Permit 03060091 (See Condition 1.1.5(b)) issued on July 23, 2003 ensure that the decreases are practically enforceable.
- b. A decrease of 10.64 tons of VOM emissions attributable to the addition of asphalt vent packages (AVPs) to Storage Tanks 231 and 232 as part of this project. The operational limitations of Condition 2.2.5(d) and (e), and the emission limitations of Condition 2.2.6(a) ensure that the decreases are practically enforceable.

1.3.2 New Source Performance Standards

- a. This permit is issued based on this project not triggering the applicability of New Source Performance Standards (NSPS) for Petroleum Refineries, 40 CFR Part 60, Subpart J for the South Sulfur Recovery Plant because the plant has the capacity to handle additional acid gas without a capital expenditure and it will not undergo a physical or operational change as part of this project.
- b. This permit is issued based on this project not triggering the NSPS for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Db for the Auxiliary Boiler because the increased firing of the boiler is within its capacity and the boiler will not undergo a physical or operational change.
- c. This permit is issued based on this project not triggering the NSPS for Petroleum Refineries, 40 CFR 60, Subpart J for the Crude Atmospheric Heaters (1-B-1A and 1-B-1B), Crude Vacuum Heater (13-B-2), Crude Unit Feed Preheater (1-B-3/13-B-4), CHD Charge Heater (3-B-1) and Auxiliary Boiler (55-B-100) because the increased firing of these units is within the capacity of the units and there will be no physical or operational change at these units.

1.3.3 National Emission Standards For Hazardous Air Pollutants

- a. This permit is issued based on the asphalt truck loading facility and the asphalt railcar loading rack not being subject to the NESHAP for Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR 63, Subpart LLLLLL because they are not used to transfer "oxidized asphalt" as defined in 40 CFR 63.8698.

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1.4 Source-Wide Control Requirements and Work Practices

- a. The operation of the Co-Generation Unit (Gas Turbine Generator [20-N-1] and Waste Heat Steam Generator [20-B-1]) shall be coordinated with the operation of the Auxiliary Boiler and the East and West CO Boilers (14-B-3, 14-B-4) as follows:
 - i. When the Co-Generation Unit and East and West CO Boilers are operating, the Auxiliary Boiler shall be operated at a rate not to exceed 340 mmBtu/hr on a daily average basis.
 - ii. Notwithstanding the above, the Auxiliary Boiler (55-B-100) may be operated in excess of 340 mmBtu/hour for purposes of shakedown/lineout and/or testing. The emissions from such additional firing shall be included when determining compliance with the annual emission limitations for the Auxiliary Boiler.
 - iii. A. When the Co-Generation Unit is shutdown or one or both of the East and West CO Boilers is shutdown (including the time period to bring a unit down), the Auxiliary Boiler may be operated at a firing rate above 340 mmBtu/hour (daily average) as needed to make up for reduced operation of the CO boiler(s) or Co-Generation Unit due to equipment failure or unit outage.
 - B. For purposes of determining compliance with the emission limits in Condition 1.5(b), emissions from the Auxiliary Boiler (55-B-100) associated with the "additional generation" addressed above may be excluded.

Note: This Condition establishes new operating requirements for the Auxiliary Boiler that were established in Condition 1.1.5-1(a) of the revised uLSD Project Construction Permit (03110060) that will supersede the requirements established by Condition 2.1.5(c) of the LSM Project Construction Permit (01030070), which addresses the configuration of the Auxiliary Boiler after the LSM Project. The 45 mmBtu/hour increase in the current limit (295 mmBtu/hour) as established in the LSM Project Construction Permit for the Auxiliary Boiler, accounts for increased steam production associated with the uLSD Project. This limit may be revised in the future as part of the permitting of other projects at the source to account for steam production associated with such other projects. This limit has been carried through in this Construction Permit for clarity regarding how to address emissions from "additional generation" described above.

1.5 Source-Wide Production and Emission Limitations

- a. Operation of the following emission units shall not exceed the following limits:

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<u>Emission Unit</u>	<u>Maximum Firing Rate*</u> <u>(mmBtu/Hour)</u>
1-B-1A	389
1-B-1B	389
1-B-3/13-B-4	240
13-B-2	277
16-B-1A, 16-B-1B (combined)	366
17-B-1	112
2-B-3, 4, 5, 6 (combined)	680
3-B-A	132
21-B-1	73

* Annual Average

- b. Combined annual emissions from the Crude Atmospheric Heaters (1-B-1A and 1-B-1B), Crude Vacuum Heater (13-B-2), Crude Unit Feed Preheater (1-B-3/13-B-4), Coker Unit Heaters (16-B-1A and 16-B-1B), PreTreater Unit Charge Heater (17-B-1), Reformer Unit Charge Heaters (2-B-3, 4, 5, 6), CHD Unit Charge Heater (3-B-1) Hot Oil Heater (21-B-1) and Auxiliary Boiler (55-B-100) shall not exceed the following limits:

<u>Pollutant</u>	<u>Emissions</u> <u>(Tons/Year)</u>
NO _x	1,270.75
CO	391.97
SO ₂	374.75
VOM	40.79
PM	41.54
PM ₁₀	41.54

The above requirement and the recordkeeping requirements of Condition 1.6.2 become effective when the Permittee begins operation of the Crude and Coker Units following completion of the changes occurring within the Crude and Coker Units as part of the CCUP.

- c. Annual emissions from the FCC Unit, North Sulfur Recovery Plant, and South Sulfur Recovery Plant shall not exceed 2,130.8 tons NO_x, 20,958.42 tons SO₂, 2,816 tons CO, 3.4 tons VOM and 469.1 tons PM/PM₁₀. Combined emissions from the North Sulfur Recovery Plant and South Sulfur Recovery Plant of SO₂, when both the North Sulfur Recovery Plant and South Sulfur Recovery Plant are operating shall not exceed 1,899.9 lbs/hour and 8,321.42 tons/year. When the North Sulfur Recovery Plant is out of service, the South Sulfur Recovery Plant emissions shall not exceed 2,482.7 lbs/hour of SO₂. The above limitations reflect the maximum allowable emissions represented in Condition 1.1.6(d)(ii) of the revised uLSD Construction Permit (03110060)

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and supersede the limits found in Condition 2.1.6(b) of the LSM Project Construction Permit (01030070).

- d. Emissions from the Regenerator Vent/CCR Vent Gas Wash Tower shall not exceed the following limits:

<u>Pollutant</u>	<u>Emissions</u>	
	<u>(Lbs/Hour)</u>	<u>(Tons/Year)</u>
NO _x	0.16	0.7
SO ₂	1.98	8.67
CO	0.82	3.60
PM/PM ₁₀	0.16	0.70
HCl/CL ₂	1.82	7.95

The above limitation reflects the allowable emissions established in Condition 2.1.6(d)(i) the LSM Project Construction Permit (01030070). This limit has been carried through in this Construction Permit for clarity. There are no changes to the previously established limitations as part of this project.

- e. Compliance with the annual limits shall be determined from a running total of 12 months of data.

1.6 Plant-Wide Recordkeeping Requirements

1.6.1 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

1.6.2 The Permittee shall maintain records of the following items to demonstrate compliance with Condition 1.5:

- a. Heat and sulfur content of refinery fuel gas burned in the affected process heaters and Auxiliary Boiler shall be determined, with supporting documentation, on a representative frequency, i.e., sulfur content shall be determined in accordance with the NSPS 40 CFR 60.105, as

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the NSPS is applicable to certain heaters at the refinery, and heat content shall be determined at least weekly;

- b. Heat and sulfur content of fuel oil, with supporting documentation, on a representative frequency, i.e., sulfur and heat content shall be determined for each batch or lot of oil added to the storage tank serving an affected heater. It should be noted that future potential emissions from all affected heaters, except the Crude Unit Feed Preheater is based on discontinued use of fuel oil on a continuous basis. The future potential emissions for the Crude Unit Feed Preheater account for limited fuel oil usage during periods of limited fuel gas availability as further described in Construction Permit 97030078.
- c. Fired fuel duty (gross) from the affected process heaters and Auxiliary Boiler, daily;
- d. Quantity of fuel burned in each affected process heater and the Auxiliary Boiler (mmscf/month and mmscf/year);
- e. Emissions of SO₂, NO_x, CO, VOM, PM, and PM₁₀ from the affected process heaters and Auxiliary Boiler (except as addressed by Condition 1.6.2(g)), in tons/month, with supporting calculations;
- f. Annual emissions of SO₂, NO_x, CO, VOM, PM, and PM₁₀ from the affected process heaters and Auxiliary Boiler (except as addressed by Condition 1.6.2(g)), for the current month and the previous 11 months, tons/year;
- g. For times when the Auxiliary Boiler is fired above 340 mmBtu/hr (daily average), the reason why (e.g., the Co-Generation Unit and/or a CO Boiler was shutdown, etc.), and quantification of the emissions resulting from the additional generation allowed by Condition 1.4(a)(iii)(B), that are not included in monthly or annual emissions records. This condition reiterates the requirements of Condition 1.1.9(e) established in the revised uLSD Construction Permit (03110060) and supersedes Condition 2.1.9(b)(vi) established in LSM Construction permit (01030070); and
- h. Emissions of NO_x, SO₂, CO, PM/PM₁₀, and HCL/CL₂ from the CCR Regenerator Vent/Vent Gas Wash Tower (tons/month and tons/year) with supporting calculations.

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1.7 Plant-Wide Compliance Procedures

1.7.1 Components

- a. Emissions from the components, i.e., leaks from valves, pumps, fittings, etc. shall be determined from standard emission estimate methodology published by USEPA in "Protocol for Equipment Leak Emission Estimates", EPA-453/R-95-017 (November 1995) or API Publication Number 337 for components in heavy liquid service.

1.7.2 Tanks

- a. Emissions from the affected tanks shall be determined through the use of an approved USEPA methodology, such as the TANKS program, appropriate AP-42 factors or other approved methods.

- 1.8. The new/modified emission units addressed by this construction permit may be operated under this permit until renewal of the CAAPP permit or a modification of the CAAPP permit is issued provided the Permittee submits a timely application to amend the current CAAPP permit to incorporate this project.

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2.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS**2.1 Unit: Components****2.1.1 Description**

These projects will involve installation of certain piping and associated components. The potential exists for VOM emissions to occur from leaks associated with the flanges, valves, pumps, and other components associated with the piping. These fugitive emissions are controlled by a leak detection and repair program.

All components associated with the CCUP Project that are in volatile organic compound service are also assumed to be "in organic hazardous air pollutant service" as defined in 40 CFR 63, Subpart CC.

2.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Components	New Fugitive Components (valves, flanges, etc)	None

2.1.3 Applicable Provisions and Regulations

- a. An "affected component" for the purpose of these unit-specific conditions, is a new component installed as part of the CCUP Project as described in Conditions 2.1.1 and 2.1.2, and any subsequent replacement of such new component.
- b. This permit is issued based upon the affected components being subject to National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries, 40 CFR 63, Subparts A and CC. The Illinois EPA administers the NESHAP for subject sources in Illinois pursuant to a delegation agreement with the USEPA. The Permittee shall comply with all applicable requirements of 40 CFR 63, Subparts A and CC.

Note: The Permittee has indicated that it generally has chosen to comply with the equipment leak requirements specified in 40 CFR 63, Subpart CC by complying with the Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry 40 CFR 60, Subpart VV. This is one of the options for compliance set forth by 40 CFR 63, Subpart CC.

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2.1.4 Non-Applicability of Regulations of Concern

- a. Pursuant to 40 CFR 63.640(p), components that would also be subject to the provisions of 40 CFR Parts 60 and 61 are required only to comply with the provisions of 40 CFR Part 63 Subpart CC, rather than Parts 60 and 61.
- b. Notwithstanding the fact that the affected components are subject to 35 IAC 218.445 through 218.452, which require a leak monitoring and repair program, the source is not required to address the provisions of these state rules. This action was based on the Illinois EPA's finding, pursuant to action in the CAAPP permit, following review of the various requirements of these state rules and the federal rules at 40 CFR Part 63, Subpart CC, that compliance with these federal rules, as is required, will assure compliance with these state rules. (Refer to 40 CFR 63.640(q)) The Permittee has chosen to comply with the equipment leak requirements of 40 CFR 63 Subpart CC by complying with the provisions of 40 CFR 60 Subpart VV pursuant to 40 CFR 63.648(a).

2.1.5 Control Requirements and Work Practices

- a. The Permittee shall comply with the applicable standards of 40 CFR 60.482-1 through 40 CFR 60.482-10.

2.1.6 Production and Emission Limitations

- a. Emissions of volatile organic material (VOM) from the new* components (i.e., valves, flanges, etc.) associated with the CCUP Project shall not exceed 5.71 tons per year, with emissions calculated using the compliance procedures specified in Condition 1.7.1.
 - * This limit does not apply to components that are already present at the refinery provided the Permittee properly identifies which components are new.
- b. Compliance with the annual limit shall be determined from a running total of 12 months of data.

2.1.7 Testing Requirements

- a. The Permittee shall comply with the applicable test methods and procedures requirements of 40 CFR 60.485.

2.1.8 Monitoring Requirements

- a. Monitoring requirements are not set for the affected components.

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2.1.9 Recordkeeping Requirements

- a. For fugitive emissions from new components installed related to this project, records shall be kept for the following:
 - i. The number of new components by unit or location and type related to this project; and
 - ii. A file containing the maximum VOM emissions attributable to the new components determined in accordance with Condition 1.7.1, including supporting calculations.
- b. The Permittee shall comply with the applicable recordkeeping requirements of 40 CFR 60.486.

2.1.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected component with the permit requirements of this section (2.1). Reports shall describe the probable cause of such deviations, and any corrective actions or preventable measures taken. As the operation of affected components is addressed by reporting requirements under applicable rules, this requirement may be satisfied with the reporting required by such regulations.
- b. The Permittee shall comply with the applicable reporting requirements of 40 CFR 60.487.

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2.2 Unit: Storage Tanks**2.2.1 Description**

Asphalt Vent Packages (AVP) will be added as part of this project to reduce emissions from existing asphalt material tanks (Tank 231 and 232). A temporary AVP will be installed for use during periods of time when the primary AVPs are not in operation or operating properly.

In addition to being able to store brackish water in Tank 103 is now authorized to store Syncrude/Crude/Various Petroleum Liquids.

2.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Tank 103	Existing External Floating Roof Storage Tank	Primary and Secondary Seals
Tank 231	Existing Fixed Roof Storage Tank	Asphalt Vent Package
Tank 232	Existing Fixed Roof Storage Tank	Asphalt Vent Package

2.2.3 Applicable Provisions and Regulations

- a. An "affected tank" for the purpose of these unit-specific conditions, is a storage tank as described in Conditions 2.2.1 and 2.2.2.
- b. This permit is issued based upon affected tank 103 being subject to NESHAP For Benzene Waste Operations, 40 CFR 61, Subpart FF. The Permittee shall comply with all applicable requirements of 40 CFR Part 61 Subpart FF.

Note: Affected tank 103 has historically been used for storage of material regulated under the requirements of National Emission Standard for Benzene Waste Operations, 40 CFR 61 Subpart FF. This permit allows for the existing affected tank 103 to be operated for the storage of various petroleum products as a result of the CCUP, in addition to being maintained to allow for storage of material regulated under the BWON provisions.

- c. The affected tank 103 is subject to 40 CFR 60, Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

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Note: The requirements of National Emission Standard for Benzene Waste Operations, 40 CFR 61 Subpart FF allow for compliance pursuant to NSPS Subpart Kb under the alternative standards of 40 CFR 61.351(a)(2).

- d. The affected tank 103 is subject to 35 IAC Part 218, Subpart B: Organic Emissions From Storage and Loading Operations.
- e. This permit is issued based upon the affected tank 103 being subject to National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries, 40 CFR 63, Subparts A and CC. The Illinois EPA administers the NESHA for subject sources in Illinois pursuant to a delegation agreement with the USEPA. The Permittee shall comply with all applicable requirements of 40 CFR 63, Subparts A and CC.

Note: Pursuant to 40 CFR 63.640(n)(1), the affected tank 103 is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb, except as provided in 40 CFR 63.640(n)(8).

2.2.4 Non-Applicability of Regulations of Concern

- a. This permit is issued based on the affected tanks 231 and 232 not being subject to 35 IAC 218.120 pursuant to 218.119(a) because the affected tanks are only used to store petroleum liquids or liquids with a vapor pressure of less than 0.5 psia.
- b. This permit is issued based on the affected tanks 231 and 232 not being subject to 35 IAC 218.121 because the affected tanks are only used to store liquids with a vapor pressure of less than 10.34 kPa (1.5 psia) at 294.3 K (70°F).
- c. This permit is issued based on the affected tank 103 not being subject to 35 IAC 218.123: Petroleum Liquid Storage Tanks, because the affected tank 103 is subject to NSPS for storage vessels of petroleum liquid, 40 CFR Part 60, Subpart Kb, pursuant to 35 IAC 218.123(a)(5).
- d. This permit is issued based on the affected tank 103 not being subject to 35 IAC 218.124: External Floating Roofs, because the affected tank 103 is exempted under 35 IAC 218.123(a)(5) since the affected tank 103 is subject to new source performance standards for storage vessels of petroleum liquid, 40 CFR Part 60, Subpart Kb, pursuant to 35 IAC 218.124(b)(1).

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- e. This permit is issued based on the affected tank 103 not being subject to 40 CFR 63.646: Storage Vessel Provisions, because the affected tank 103 is subject to new source performance standards for storage vessels of petroleum liquid, 40 CFR Part 60, Subpart Kb, pursuant to 40 CFR 63.640(n)(1), except as provided by 40 CFR 63.640(n)(8).
- f. This permit is issued based on storage tanks 231, 232, 233, 234, 235, and 236 not being subject to the NESHA for Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681(c). These tanks are Group B storage tanks subject to 40 CFR 63 Subpart CC.

2.2.5 Control Requirements and Work Practices

- a. The Permittee shall equip the affected tank 103 with an external floating roof. An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. The external floating roof must meet the following specifications [40 CFR 60.112b(a)(2)]:
 - i. The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal [40 CFR 60.112b(a)(2)(i)].
 - A. The primary seal shall be a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall [40 CFR 60.112b(a)(2)(i)(A)].
 - B. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4) [40 CFR 60.112b(a)(2)(i)(B)].
 - 1. Storage vessels that are to comply with 40 CFR 60.112b(a)(2) are exempt from the secondary seal requirements of 40 CFR 60.112b(a)(2)(i)(B) during the gap measurements for the primary seal required by 40 CFR 60.113b(b) [40 CFR 63.640(n)(8)(i)].

2. Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer' recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening [40 CFR 60.112b(a)(2)(ii)].
 3. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible [40 CFR 60.112b(a)(2)(iii)].
- b. The affected tank 103 shall be designed and equipped with a floating roof which rests on the surface of the volatile organic liquid and is equipped with a closure seal or seals between the roof edge and the tank wall. Such floating roof shall not be permitted if the volatile organic liquid has a vapor pressure of 86.19 kPa (12.5 psia) or greater at 294.3 K (70°F). No person shall cause or allow the emission of air contaminants into the atmosphere from any gauging or sampling devices attached to such tanks, except during sampling or maintenance operations [35 IAC 218.121(b)(1)].
 - c. The affected tank 103 shall be equipped with a permanent submerged loading pipe, submerged fill, or an equivalent

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device approved by the Agency according to the provisions of 35 Ill. Adm. Code 201 [35 IAC 218.122(b)].

- d. i. Tanks 231, 232, and 233 shall be equipped with a vapor collection and control system, i.e., the primary and temporary AVP control system, capable of reducing emissions by 96 percent.
- ii. The Permittee shall not commence to load material into Tanks 231, 232, and 233 during an outage of the primary AVPs unless the tanks are properly controlled by the temporary AVP.
- iii. In the event the filling of the tank has commenced and there is an outage caused by a malfunction of the AVP, the Permittee shall arrange for proper control by the temporary AVP as soon as practicable and shall comply with the recordkeeping and reporting requirements of Conditions 2.2.9 and 2.2.10.
- iv. The Permittee shall conduct maintenance as per manufacturer's recommendation to ensure that each control system (asphalt vent package) on Tanks 231, 232, and 233 works properly. At a minimum, the Permittee shall:
 - A. Replace the prefilter in accordance with the manufacturer's guidelines for maximum pressure drop across the prefilter; and
 - B. Replace the mist eliminator in accordance with the manufacturer's guidelines for maximum pressure drop across the mist eliminator.
- e. The Permittee shall not store material with a maximum true vapor pressure in excess of 5.5 psia in Storage Tank 103.

2.2.6 Production and Emission Limitations

- a. i. Emissions of volatile organic material from tanks 231, 232, 233, 234, 235, 236, the asphalt truck loading facility and the asphalt railcar loading rack shall not exceed 5.1 tons/month and 30.39 tons/year. This condition supersedes Condition 1.1.6(a) established in the Asphalt Railcar Loading Operations Construction Permit (04090004).

The above requirement and the recordkeeping and reporting requirements of Conditions 2.2.9(a), (b) and (c) and 2.2.10(a) become effective when the Permittee begins operation of the Asphalt Vent Packages on Tanks 231 and 232. Until such time, the

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requirements of Condition 2.2.6(a) in the Asphalt Railcar Loading Operations Construction Permit (04090004) shall apply.

- ii. Emissions of volatile organic material (VOM) from affected tank 103 shall not exceed 3.50 tons/year.
- iii. Notwithstanding Condition 2.2.6(a)(i) and (ii), the equipment described in Condition 2.2.6(a)(i) may be operated in excess of the permitted emission rate, as specified below, until Tank 103 is returned to service. After this period, the emission limits in Condition 2.2.6(a)(i) and (ii) will apply.
 - A. During this period, the emissions from the Tanks 231, 232, 233, 234, 235, 236, the asphalt truck loading facility, and the asphalt railcar loading rack shall not exceed 32.55 tons per year combined.
 - B. During this period, the recordkeeping requirements (See Condition 2.2.9(c)) shall be used to determine compliance with the emission limits in Condition 2.2.6.
 - C. The Permittee shall notify the Illinois EPA when Tank 103 is brought back into service.
- b. Compliance with the annual limit shall be determined from a running total of 12 months of data.

2.2.7 Testing and Inspection Requirements

- a. The Permittee shall fulfill all applicable testing and procedures requirements of 40 CFR 60.113b(b) for the affected tank 103 [40 CFR 60.113b(b)].
 - i. If the owner or operator determines that it is unsafe to perform the seal gap measurements required in 40 CFR 60.113b(b), the owner or operator shall comply with the requirements in either 40 CFR 63.120(b)(7)(i) or 40 CFR 63.120(b)(7)(ii) [40 CFR 63.640(n)(8)(ii)].
 - ii. If a failure is detected during the seal gap measurements required by 40 CFR 60.113b(b)(1), and the vessel cannot be repaired within 45 days and the vessel cannot be emptied within 45 days, the owner or operator may utilize up to two extensions of up to 30 additional calendar days each. The owner or operator is not required to provide a request for the

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extension to the Administrator [40 CFR 63.640(n)(8)(iii)].

- b. The Permittee shall fulfill all applicable monitoring of operations requirements of 40 CFR 60.116b for the affected tank 103 [40 CFR 60.116b].

2.2.8 Monitoring Requirements

- a. For purposes of determining when to replace the mist eliminator, the Permittee shall measure the pressure drop across the mist eliminator of the AVPs associated with Storage Tanks 231 and 232.

2.2.9 Recordkeeping Requirements

- a. The Permittee shall maintain a record of the following items:
 - i. Periods of time when either Tank 231, 232, or 233 was not controlled by a properly operating asphalt vent package;
 - ii. An estimate of the emissions during each of the periods identified above, with supporting calculations;
 - iii. For each period identified above, the reason the asphalt vent package was not in operation (planned maintenance, malfunction/breakdown of the AVP, etc.) and any corrective actions taken.
- b. The Permittee shall maintain a maintenance log for each asphalt vent package which, at a minimum, includes a record of the filter/mist eliminator replacement and the date of the replacement;
- c. VOM emissions, including those emissions during periods when the asphalt vent package(s) are not in operation or operating properly, from tanks 231, 232, 233, 234, 235, 236, the asphalt truck loading facility, and the asphalt railcar loading facility (tons/month and tons/year);
- d. The Permittee shall maintain records of the following items to demonstrate compliance with the limits of Conditions 2.2.5(f) and 2.2.6(b):
 - i. The type, characteristic and quantity of each material stored in Tank 103, including the maximum true vapor pressure;

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- ii. Actual emissions of VOM emissions from Tank 103, tons/month and tons/year.
- e. The Permittee shall fulfill all applicable recordkeeping requirements of 40 CFR 60.115b for the affected tank 103 [40 CFR 60.115b].

2.2.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected tank with the permit requirements of this section (2.2). Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. As certain requirements regarding the operation of affected tank 103 is addressed by reporting requirements under applicable rules, this requirement may be satisfied with the reporting required by such regulations.
- b. The Permittee shall fulfill all applicable reporting requirements specified in 40 CFR 60.115b for the affected tank 103 [40 CFR 60.115b].
 - i. Owners and operators of storage vessels complying with Subpart Kb of Part 60 may submit the inspection reports required by 40 CFR 60.115b(b)(4) as part of the periodic reports required by 40 CFR Part 63, Subpart CC, rather than within the 30-day period specified in 40 CFR 60.115b(b)(4) [40 CFR 63.640(n)(8)(v)].
 - ii. The reports of rim seal inspections specified in 40 CFR 60.115b(b)(2) are not required if none of the measured gaps or calculated gap areas exceed the limitations specified in 40 CFR 60.113b(b)(4). Documentation of the inspections shall be recorded as specified in 40 CFR 60.115b(b)(3) [40 CFR 63.640(n)(8)(vi)].
- c. For affected tank 103, if an extension is utilized in accordance with 40 CFR 63.640(n)(8)(iii), the owner or operator shall, in the next periodic report, identify the vessel, provide the information listed in 40 CFR 60.113b(b)(4)(iii), and describe the nature and date of the repair made or provide the date the storage vessel was emptied [40 CFR 63.640(n)(8)(iv)].

It should be noted that this permit has been revised to authorize installation of a temporary asphalt vent package for control of volatile organic material emissions from Tanks 231, 232, and 233 during periods of time when the primary asphalt vent packages are either not operating or not operating properly.

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If you have any questions on this permit, please contact Jason Schnepf at 217/782-2113.

COPY

Original Signed by
Edwin C. Bakowski, P.E.

Edwin C. Bakowski, P.E.
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed:

June 26, 2008

JMS
ECB:JMS:psj

cc: Region 1
Lotus Notes

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Attachment 1PSD Applicability - SO₂ Netting Analysis

Contemporaneous Time Period: October 2000 Through October 2005

Table I - Project Emissions Increases and Decreases

<u>Item of Equipment</u>	<u>Emission Change (Tons/Year)</u>
1-B-1A	-44.27
1-B-1B	-36.71
1-B-3/13-B-4	43.79
13-B-2	-37.62
16-B-1A, 16-B-1B	33.04
17-B-1	11.61
2-B-3,4,5,6	67.06
3-B-1	12.78
21-B-1	8.59
FCC/SSRU/NSRU	2,424.36
55-B-100	33.00
CCR Vent Gas Wash Tower	3.93
Total:	2,519.56

Table II - Source-Wide Creditable Contemporaneous Emission Increases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions (Tons/Year)</u>	<u>Permit Number</u>
FCC Jumpover Line	5/2002	32.23	02030040
Repl. FCC Expander Turbine	10/2003	2.36	02040013
Coker B/D Tank	3/2004	7.02	03060085
Temporary Coker Diesel Pump	12/2004	0.28	04100043
Hydrogen Plant	10/2004	0.56	05020063
uLSD	10/2004	238.87	03110060
Total:		281.32	

Table III - Source-Wide Creditable Contemporaneous Emission Decreases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions (Tons/Year)</u>	<u>Permit Number</u>
Low Sulfur Mogas	10/2003	576.83	01030070
Coker B/D Recovery	9/2004	2,593.00	03060091
Total:		3,169.83	

Table IV - Net Emissions Change

	<u>(Tons/Year)</u>
Increases and Decreases Associated With Proposed Modification	2,519.56
Creditable Contemporaneous Emission Increases	281.32
Creditable Contemporaneous Emission Decreases	-3,169.83
	-368.95

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Attachment 2aPSD Applicability - NO_x Netting Analysis

Contemporaneous Time Period: October 2000 through October 2005

Table I - Project Emissions Increases and Decreases

<u>Item of Equipment</u>	<u>Emission Change (Tons/Year)</u>
1-B-1A	86.25
1-B-1B	83.14
1-B-3/13-B-4	12.19
13-B-2	71.36
16-B-1A, 16-B-1B	47.11
17-B-1	12.46
2-B-3,4,5,6	69.85
3-B-1	42.19
21-B-1	12.79
CCR Vent Gas Wash Tower	0.00
FCC/CO Boiler/SSRU/NSRU	312.43
55-B-100	46.84
Total:	796.61

Table II - Source-Wide Creditable Contemporaneous Emission Increases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions Increase (Tons/Year)</u>	<u>Permit Number</u>
FCC Jumpover Line	5/2002	8.19	02030040
Low Sulfur Mogas	10/2003	39.04	01030070
FCC Expander Turbine	10/2003	12.26	02040013
Coker Blowdown Tank	3/2004	3.21	03060085
Temporary Coker Diesel Pump	12/2004	4.19	04100043
Hydrogen Plant	10/2005	41.88	05020063
uLSD	10/2005	16.45	03110060
Total:		125.22	

Table III - Source-Wide Creditable Contemporaneous Emission Decreases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions Decrease (Tons/Year)</u>	<u>Permit Number</u>
Coker B/D Recovery	11/2004	219.00	03060091

Table IV - Net Emissions Change

	<u>(Tons/Year)</u>
Increases and Decreases Associated With Proposed Modification	796.61
Creditable Contemporaneous Emission Increases	125.22
Creditable Contemporaneous Emission Decreases	-219.00
	702.83

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Attachment 2bNon-attainment NSR Applicability - NO_x Netting Analysis (8-hour Ozone)

Contemporaneous Time Period: March 2000 through October 2005

Table I - Project Emissions Increases and Decreases

<u>Item of Equipment</u>	<u>Emission Change (Tons/Year)</u>
1-B-1A	86.25
1-B-1B	83.14
1-B-3/13-B-4	12.19
13-B-2	71.36
16-B-1A, 16-B-1B	47.11
17-B-1	0.00
2-B-3,4,5,6	0.00
3-B-1	42.19
21-B-1	0.00
CCR Vent Gas Wash Tower	0.00
FCC/CO Boiler/SSRU/NSRU	312.43
55-B-100	0.00
Total:	654.67

Table II - Source-Wide Creditable Contemporaneous Emission Increases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions Increase (Tons/Year)</u>	<u>Permit Number</u>
FCC Jumpover Line	5/2002	8.19	02030040
Low Sulfur Mogas	10/2003	39.04	01030070
FCC Expander Turbine	10/2003	12.26	02040013
Coker Blowdown Tank	3/2004	3.21	03060085
Temporary Coker Diesel Pump	12/2004	4.19	04100043
Hydrogen Plant	10/2005	41.88	05020063
uLSD	10/2005	78.48	03110060
Total:		187.25	

Table III - Source-Wide Creditable Contemporaneous Emission Decreases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions Decrease (Tons/Year)</u>	<u>Permit Number</u>
Coker B/D Recovery	11/2004	219.00	03060091

Table IV - Net Emissions Change

	<u>(Tons/Year)</u>
Increases and Decreases Associated With Proposed Modification	654.67
Creditable Contemporaneous Emission Increases	187.25
Creditable Contemporaneous Emission Decreases	-219.00
	622.92

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Attachment 3

PSD Applicability - CO Netting Analysis

Contemporaneous Time Period: October 2000 through October 2005

Table I - Project Emissions Increases and Decreases

<u>Item of Equipment</u>	<u>Emission Change (Tons/Year)</u>
1-B-1A	18.96
1-B-1B	19.39
1-B-3/13-B-4	6.02
13-B-2	17.65
16-B-1A, 16-B-1B	9.64
17-B-1	1.44
2-B-3,4,5,6	10.27
3-B-1	7.98
21-B-1	4.80
CCR Vent Gas Wash Tower	1.71
FCC/CO Boiler/SSRU/NSRU	58.31
55-B-100	84.36
Total:	240.53

Table II - Source-Wide Creditable Contemporaneous Emission Increases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions Increase (Tons/Year)</u>	<u>Permit Number</u>
FCC Jumpover Line	5/2002	1.69	02030040
Low Sulfur Mogas	10/2003	95.72	01030070
FCC Expander Turbine	10/2003	3.07	02040013
Coker Blowdown Tank	3/2004	0.74	03060085
Temporary Coker Diesel Pump	12/2004	0.90	04100043
Hydrogen Plant	10/2005	32.49	05020063
uLSD	10/2005	14.74	03110060
Total:		149.35	

Table III - Source-Wide Creditable Contemporaneous Emission Decreases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions Decrease (Tons/Year)</u>	<u>Permit Number</u>
Coker B/D Recovery	11/2004	50.00	03060091

Table IV - Net Emissions Change

	<u>(Tons/Year)</u>
Increases and Decreases Associated With Proposed Modification	240.53
Creditable Contemporaneous Emission Increases	149.35
Creditable Contemporaneous Emission Decreases	- 50.00
	339.88

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Attachment 4a

PSD Applicability - VOM Netting Analysis

Contemporaneous Time Period: October 2000 through October 2005

Table I - Emissions Increases and Decreases Associated With The Proposed Modification

<u>Item of Equipment</u>	<u>Emission Change (Tons/Year)</u>
1-B-1A	1.89
1-B-1B	1.80
1-B-3/13-B-4	0.50
13-B-2	1.59
16-B-1A, 16-B-1B	1.19
17-B-1	0.00
2-B-3,4,5,6	0.00
3-B-1	0.92
21-B-1	0.00
CCR Vent Gas Wash Tower	0.00
FCC/CO Boiler, SSRU, NSRU	0.31
55-B-100	0.00
Fugitive Components	5.71
Tank 103	2.16
Tank 231 (Asphalt Vent Package)	-5.48
Tank 232 (Asphalt Vent Package)	-5.16
Total:	5.43 ^a

* 16.07 tons excluding decreases, which is less than significant.

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Attachment 4b

Non-attainment NSR Applicability - VOM Netting Analysis (8-hour Ozone)

Contemporaneous Time Period: March 2000 through October 2005

Table I - Emissions Increases and Decreases Associated With The Proposed Modification

<u>Item of Equipment</u>	<u>Emission Change (Tons/Year)</u>
1-B-1A	1.89
1-B-1B	1.80
1-B-3/13-B-4	0.50
13-B-2	1.59
16-B-1A, 16-B-1B	1.19
17-B-1	0.00
2-B-3,4,5,6	0.00
3-B-1	0.92
21-B-1	0.00
CCR Vent Gas Wash Tower	0.00
FCC/CO Boiler, SSRU, NSRU	0.31
55-B-100	0.00
Fugitive Components	5.71
Tank 103	2.16
Tank 231 (Asphalt Vent Package)	-5.48
Tank 232 (Asphalt Vent Package)	-5.16
Total:	5.43 ^a

^a 16.07 tons excluding decreases, which is less than significant.

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Attachment 5

PSD Applicability - PM Netting Analysis

Contemporaneous Time Period: October 2000 through October 2005

Table I - Project Emissions Increases and Decreases

<u>Item of Equipment</u>	<u>Emission Change (Tons/Year)</u>
1-B-1A	-1.14
1-B-1B	-1.22
1-B-3/13-B-4	0.51
13-B-2	-6.27
16-B-1A, 16-B-1B	1.12
17-B-1	0.94
2-B-3,4,5,6	4.40
3-B-1	0.88
21-B-1	0.96
CCR Vent Gas Wash Tower	0.30
FCC/CO Boiler/SSRU/NSRU	97.41
55-B-100	4.27
Fugitive Particulate - Coker	6.88
Total:	109.04

Table II - Source-Wide Creditable Contemporaneous Emission Increases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions Increase (Tons/Year)</u>	<u>Permit Number</u>
FCC Jumpover Line	5/2002	0.24	02030040
Low Sulfur Mogas	10/2003	12.10	01030070
FCC Expander Turbine	10/2003	0.26	02040013
Coker Blowdown Tank	3/2004	0.44	03060085
Temporary Coker Diesel Pump	12/2004	0.29	04100043
Hydrogen Plant	10/2005	5.00	05020063
uLSD	10/2005	1.08	03110060
Total:		19.41	

Table III - Source-Wide Creditable Contemporaneous Emission Decreases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions Decrease (Tons/Year)</u>	<u>Permit Number</u>
None			

Table IV - Net Emissions Change

	<u>(Tons/Year)</u>
Increases and Decreases Associated With Proposed Modification	109.04
Creditable Contemporaneous Emission Increases	19.41
Creditable Contemporaneous Emission Decreases	0.00
	128.45

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Attachment 6PSD Applicability - PM₁₀ Netting Analysis

Contemporaneous Time Period: October 2000 through October 2005

Table I - Project Emissions Increases and Decreases

<u>Item of Equipment</u>	<u>Emission Change (Tons/Year)</u>
1-B-1A	-1.14
1-B-1B	-1.22
1-B-3/13-B-4	0.51
13-B-2	-6.27
16-B-1A, 16-B-1B	1.12
17-B-1	0.94
2-B-3,4,5,6	4.40
3-B-1	0.88
21-B-1	0.96
CCR Vent Gas Wash Tower	0.30
FCC/CO Boiler/SSRU/NSRU	97.41
55-B-100	4.27
Fugitive Particulate - Coker	3.51
Total:	105.67

Table II - Source-Wide Creditable Contemporaneous Emission Increases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions Increase (Tons/Year)</u>	<u>Permit Number</u>
FCC Jumpover Line	5/2002	0.24	02030040
Low Sulfur Mogas	10/2003	12.10	01030070
FCC Expander Turbine	10/2003	0.26	02040013
Coker Blowdown Tank	3/2004	0.44	03060085
Temporary Coker Diesel Pump	12/2004	0.29	04100043
Hydrogen Plant	10/2005	5.00	05020063
uLSD	10/2005	1.08	03110060
Total:		19.41	

Table III - Source-Wide Creditable Contemporaneous Emission Decreases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions Decrease (Tons/Year)</u>	<u>Permit Number</u>
None			

Table IV - Net Emissions Change

	<u>(Tons/Year)</u>
Increases and Decreases Associated With Proposed Modification	105.67
Creditable Contemporaneous Emission Increases	19.41
Creditable Contemporaneous Emission Decreases	0.00
	125.08

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Attachment 7Non-Attainment Area NSR Applicability - PM_{2.5} Netting Analysis

Contemporaneous Time Period: December 17, 2004 through October 2005

Table I - Project Emissions Increases and Decreases

<u>Item of Equipment</u>	<u>Emission Change (Tons/Year)</u>
1-B-1A	-1.14
1-B-1B	-1.22
1-B-3/13-B-4	0.51
13-B-2	-6.27
16-B-1A, 16-B-1B	1.12
17-B-1	0.94
2-B-3,4,5,6	4.40
3-B-1	0.88
21-B-1	0.96
CCR Vent Gas Wash Tower	0.30
FCC/CO Boiler/SSRU/NSRU	97.41
55-B-100	4.27
Fugitive Particulate - Coker	3.51
Total:	105.67

Table II - Source-Wide Creditable Contemporaneous Emission Increases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions Increase (Tons/Year)</u>	<u>Permit Number</u>
Temporary Coker Diesel Pump	12/2004	0.29	04100043
Hydrogen Plant	10/2005	5.00	05020063
uLSD	10/2005	1.08	03110060
Total:		6.37	

Table III - Source-Wide Creditable Contemporaneous Emission Decreases

<u>Item of Equipment</u>	<u>Date</u>	<u>Emissions Decrease (Tons/Year)</u>	<u>Permit Number</u>
None			

Table IV - Net Emissions Change

	<u>(Tons/Year)</u>
Increases and Decreases Associated With Proposed Modification	105.67
Creditable Contemporaneous Emission Increases	6.37
Creditable Contemporaneous Emission Decreases	0.00
	112.04

JMS:05030076:psj

**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY**

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-3397

BRUCE RAUNER, GOVERNOR

ALEC MESSINA, ACTING DIRECTOR

217/785-1705

**CONSTRUCTION PERMIT -- PSD APPROVAL
NSPS SOURCE****PERMITTEE**

Invenergy Nelson Expansion LLC
Attn: Gordon Gray
1311 Nelson Road
Rock Falls, Illinois 61058

Application No.: 15060042I.D. No.: 103814AACApplicant's Designation: Simple Cycle TurbinesDate Received: June 29, 2015Date Issued: SEP 27 2018Subject: Peaking Facility with Two Simple Cycle Combustion TurbinesLocation: Nelson Energy Center, 1311 Nelson Road, Rock Falls

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission units and air pollution control equipment consisting of a peaking facility with two simple cycle combustion turbines, as described in the above referenced application. This permit is granted based upon and subject to the findings and conditions that follow.

In conjunction with this permit, approval is given with respect to the federal regulations for Prevention of Significant Deterioration of Air Quality (PSD) for the facility, as described in the application, in that the Illinois EPA finds that the application fulfills all applicable requirements of 40 CFR 52.21. This approval is issued pursuant to the federal Clean Air Act, the federal PSD rules at 40 CFR 52.21, and a Delegation of Authority agreement between the USEPA and the Illinois EPA for the administration of the PSD Program. This approval becomes effective in accordance with the provisions of 40 CFR 124.15 and may be appealed in accordance with provisions of 40 CFR 124.19. This approval is based upon the findings that follow. This approval is subject to the following conditions. This approval is also subject to the general requirement that the facility be developed and operated consistent with the specifications and data included in the application and any significant departure from the terms expressed in the application, if not otherwise authorized by this permit, must receive prior written authorization from the Illinois EPA.

If you have any questions on this permit, please call Bob Smet at 217/785-1705.

Raymond E. Pilapil SMS

Raymond E. Pilapil
Manager, Permit Section
Division of Air Pollution Control

REP:RPS:jws

FINDINGS

1. Invenergy Nelson Expansion LLC has applied for a permit to construct a peaking facility (the affected facility) at the Nelson Energy Center, the existing natural gas-fired power plant east of Rock Falls in Lee County, which is operated by Invenergy Services LLC. The affected facility will have the capacity to produce about 380 MW of electricity for the grid with two simple cycle combustion turbine-generators (the affected turbines). Natural gas will be the primary fuel for the affected turbines, and ultra-low-sulfur diesel will be the backup or secondary fuel. The affected facility will also include a natural gas-fired fuel heater and storage tanks for ultra-low-sulfur diesel and lubricating oil.
2. Lee County is attainment or unclassified for all criteria pollutants.
- 3a. Under the PSD rules, the affected facility will be a major modification of the existing plant for nitrogen oxides (NOx), particulate matter (PM), particulate matter₁₀ (PM₁₀) and particulate matter_{2.5} (PM_{2.5}), with potential emissions of these pollutants that are significant. The affected facility will also be subject to PSD for greenhouse gases (GHG) because the facility's potential emissions of these pollutants exceed the applicable significant emission rate under the PSD rules. (Refer to Attachment 1 for a summary of the potential emissions of the affected facility.)
- b. The affected facility would not be a major modification under the PSD rules for emissions of volatile organic material (VOM), carbon monoxide (CO), sulfur dioxide (SO₂) or other regulated NSR pollutants. This is because the potential emissions of these other pollutants, as have been addressed by the provisions of this permit, will be below the applicable significant emission rates under the PSD rules.
- c. Upon completion of the project, the plant will continue to be a minor source for emissions of hazardous air pollutants (HAPs), i.e., the potential emissions from the plant as limited by this permit, will be less than 10 tons of an individual HAP and 25 tons for total HAPs. Therefore, the affected facility is not subject to National Emission Standards for Hazardous Air Pollutants (NESHAP), adopted by USEPA under 40 CFR 63 that only apply to major sources of HAPs.
4. After reviewing the materials submitted by Invenergy Nelson Expansion, the Illinois EPA has determined that the affected facility will (i) comply with applicable Board emission standards, (ii) comply with applicable federal emission standards, and (iii) utilize Best Available Control Technology (BACT) on emission units as required by PSD.

Note: The determinations of BACT made by the Illinois EPA for the various emission units at the affected facility are generally contained in the permit conditions for specific emission units that are headed by "Control Technology Determinations (BACT)".

5. The air quality analysis submitted by Invenenergy Nelson Expansion and reviewed by the Illinois EPA shows that the affected facility will not cause or contribute to violations of the National Ambient Air Quality Standards for nitrogen dioxide (NO₂), ozone (O₃), PM₁₀ or PM_{2.5}. The air quality analysis also shows compliance with the Class II allowable increments, as applicable under the PSD rules.
6. The Illinois EPA has determined that the construction permit application for the affected facility complies with all applicable state air pollution regulations and the PSD rules.
7. A copy of the application, the project summary prepared by the Illinois EPA and a draft of this construction permit, were placed in a nearby public repository, and the public was given notice and an opportunity to examine this material and to submit comments on the proposed issuance of this permit.
8. The Illinois EPA has also issued an Acid Rain permit addressing the affected turbines. These turbines would be "affected units" under the Acid Rain Program pursuant to Title IV of the Clean Air Act. As affected units under this program, SO₂ allowances must be held for the actual emissions of SO₂ from the turbines. The turbines are also subject to emissions monitoring requirements for SO₂ and NO_x.

PART 1: PERMIT CONDITIONS FOR THE PROJECT

CONDITION 1.1: EFFECT OF PERMIT

- a. This permit does not relieve the Permittee of the responsibility to comply with all local, state and federal regulations that are part of the applicable Illinois' State Implementation Plan, as well as all other applicable federal, state and local requirements.
- b. In particular, this permit does not relieve the Permittee from the responsibility to carry out practices during the construction of the affected facility, such as application of water or dust suppressant sprays to roadways, as necessary to minimize fugitive dust and prevent an air pollution nuisance from fugitive dust, as prohibited by 35 IAC 201.141.

CONDITION 1.2: VALIDITY OF PERMIT AND COMMENCEMENT OF CONSTRUCTION

- a. This permit shall become invalid if construction is not commenced within 18 months after this permit becomes effective, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable period of time, pursuant to 40 CFR 52.21(r)(2). The Illinois EPA may extend the 18-month period upon a satisfactory showing that an extension is justified. This condition supersedes Standard Condition 1.
- b. For purposes of the above provisions, the definitions of "construction" and "commence" at 40 CFR 52.21 (b)(8) and (9) shall apply, which requires that a source must enter into a binding agreement for on-site construction or begin actual on-site construction. (See also the definition of "begin actual construction," 40 CFR 52.21 (b)(11).)

CONDITION 1.3: EMISSIONS OF THE AFFECTED FACILITY

The emissions of the affected facility shall not exceed the limits in Attachment 1.

CONDITION 1.4: EMISSIONS OF HAZARDOUS AIR POLLUTANTS (HAPS) FROM THE PLANT

- a. The emissions of hazardous air pollutants (HAP) from the plant, including both the existing facility and the affected facility, shall not exceed 8.0 tons per year for any individual HAP and 20.0 tons per year for all HAP emitted by the plant.
- b. The Permittee shall keep and maintain records for the emissions of HAPS from all emission units at the source (tons/month and tons/year), with supporting documentation and calculations.

CONDITION 1.5: STORAGE TANKS AND ROADWAYS

- a. This permit is issued based on negligible emissions of VOM from the storage tanks at the affected facility for ultra-low-sulfur diesel and lubricating oil, i.e., total VOM emissions from these tanks of no more than 0.10 ton/year.

- b. The roadways used by vehicles delivering ultra-low-sulfur diesel to the affected facility shall be paved and this pavement shall be maintained in good condition.

CONDITION 1.6: GOOD AIR POLLUTION CONTROL PRACTICES

The Permittee shall operate and maintain all emission units at the affected facility, including associated air pollution control equipment, in a manner consistent with good air pollution control practice, as follows:

- a. At all times, including periods of startup, shutdown, malfunction or breakdown, operate as practicable to minimize emissions.
- b. Conduct routine inspections and perform appropriate maintenance and repairs to facilitate proper functioning of equipment and minimize or prevent malfunctions and breakdowns.
- c. Install, calibrate and maintain required monitoring devices and instrumentation in accordance with good monitoring practices, following the manufacturer's recommended operating and maintenance procedures or such other procedures as otherwise necessary to assure reliable operation of such devices.

CONDITION 1.7: COMPLIANCE WITH EMISSION STANDARDS AND EMISSION LIMITS

- a. The emission limits set by this permit, including BACT limits and other permit limits for emissions, apply at all times unless otherwise specified in a particular provision.
- b. The emission limits in this permit for particulate matter (PM) address only filterable particulate, as would be measured by USEPA Method 5 or other appropriate USEPA Test Methods. The emissions limits for PM₁₀ and PM_{2.5} address both filterable and condensable particulate.
- c. When performance or emission testing is conducted, compliance with hourly limits set by this permit shall be determined from the average of the test results, commonly three runs, each at least one hour in duration.
- d. During periods of operation other than performance testing, compliance with the emission limits set by this permit shall be determined from operating information for emission units, including information for both the amount of material processed and the operational condition of the units and their control devices, and from appropriate values for emission rates or emission factors that do not understate actual emissions of the units as they were actually operated. For this purpose, for emission units for which performance testing has been conducted, values for emission rates or emissions factors developed from the most recent testing for an emission unit shall be used unless it is determined that this would understate actual emissions of the unit, either as a general matter or for a particular period of operation, in which case alternative rates or factors shall be developed and used consistent with the principles of credible evidence.

- e. i. Except as provided below or otherwise specified in a particular provision of this permit, compliance with annual limits established by this permit shall be determined from a rolling total of 12 months of data, i.e., from the sum of the data for the current month and data for the preceding 11 months (12 month total), and shall consider all emissions or operation, including periods of startup, shutdown, and malfunction and breakdown.
- ii. For the first year (12 months) of operation of the affected facility, compliance with annual limits shall be determined from a cumulative total of monthly data, i.e., from the sum of the data for the current month and data for all preceding months since the initial operation of an emission unit at the affected facility.

CONDITION 1.8: RECORDS FOR MONITORING SYSTEMS AND INSTRUMENTATION

- a. The Permittee shall keep records of the data measured by required monitoring systems and instrumentation. Unless otherwise provided in a particular condition of this permit, the following requirements shall apply to such recordkeeping:
 - i. For required monitoring systems, data shall be automatically recorded by a central data system, dedicated data logging system, chart recorder or other data recording device. If an electronic data logging system is used, the recorded data shall be the hourly average value of the particular parameter for each hour. During periods when the automatic recording device is out of service, data shall be recorded at least once per hour for periods when the associated emission unit(s) is in service.
 - ii. For required instrumentation, the measured data shall be recorded manually at least once per day, unless otherwise specified, with data and time both recorded, for periods when the associated emission unit(s) are in service, provided however that if data from an instrument is recorded automatically, the above provisions for recording of data from monitoring systems shall apply and manual recording of data is not required.
- b. The Permittee shall keep records for the operation, calibration maintenance and repair of required monitoring systems and instrumentation. These operating records shall, at a minimum, identify the date and duration of any time when a required monitoring instrument or device was not in operation, with explanation; the performance of manual quality control and quality assurance procedures for the system; and maintenance and repair activities performed for the system.
- c. The Permittee shall maintain a file containing a copy of the specifications for each required monitoring device or instrument and the recommended operating and maintenance procedures for the device as provided by its manufacturer.

CONDITION 1.9: RECORDS FOR OPACITY MEASUREMENTS

- a. The Permittee shall keep records for all opacity measurements made in accordance with USEPA Method 9 for emission units at the affected facility that it conducts or that are conducted on its behalf by individuals who are qualified to make such observations. For each occasion on which such measurements are made, these records shall include the formal report for the measurements if conducted pursuant to this permit or a request from the Illinois EPA, or otherwise the identity of the observer, a description of the measurements that were made, the operating condition of the affected operations, the observed opacity, and copies of the raw data sheets for the measurements.

CONDITION 1.10: RETENTION AND AVAILABILITY OF RECORDS

- a. Where a condition requires that a file be kept containing certain information, the file shall be updated as needed to keep the information current. Each new version or update shall be marked with the date that it was prepared and shall become effective on that date unless a later "effective date" is also specified.
- b. The Permittee shall retain all records and logs required by this permit for at least five years from the date of entry (unless a longer retention period is specified by a particular provision), keep the records at a location at the plant or that is readily accessible from the plant and make records available for inspection and copying by the Illinois EPA or USEPA upon request.

CONDITION 1.11: ADDRESSES FOR THE ILLINOIS EPA

- a. Notifications and reports required by this permit shall be sent to the Illinois EPA at the following address unless otherwise indicated:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance and Enforcement Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

Telephone: 217/782-5811 Fax: 217/524-4710

- b. One copy of notifications and reports required by this permit that concern emission testing and monitoring shall also be sent electronically to the Illinois EPA, Bureau of Air, Compliance Section, Source Monitoring Unit, using the State of Illinois's File Transfer Website, unless otherwise instructed by the Illinois EPA:

<http://filet.illinois.gov>

Recipient Email Address: EPA.BOA.SMU@illinois.gov

File Transfer Email Subject: Invenergy Nelson Expansion, Rock Falls, ID 103814AAC

Message to Recipient: "A description of submittal, with date"

CONDITION 1.12: AUTHORIZATION TO OPERATE EMISSION UNITS

- a. The affected facility may be operated for a period that ends one year after initial startup of an affected turbine, except as further provided below. This period may be extended by Illinois EPA upon request of the Permittee if additional time is needed to complete shakedown or complete initial performance testing for the affected turbines.
- b. Upon completion of required performance testing for the affected turbines, the Permittee may continue to operate the affected facility as allowed by Section 39.5(5)(h) of Illinois' Environmental Protection Act provided that the Permittee has submitted a timely application under the Clean Air Act Permit Program (CAAPP), in accordance with Section 39.5(5)(x) of this Act, to address the affected facility.
- c. These conditions supersede Standard Condition 6.

CONDITION 1.13: STANDARD CONDITIONS

Standard conditions for issuance of construction permits, attached hereto, shall apply to this project, unless specifically superseded by other conditions in the permit. (Refer to Attachment 2.)

PART 2: UNIT-SPECIFIC CONDITIONS FOR PARTICULAR EMISSION UNIT(S)

Part 2.1: UNIT-SPECIFIC CONDITIONS FOR THE COMBUSTION TURBINES

2.1.1 Introduction

Two simple-cycle combustion turbines will be used to power electrical generators and supply electricity to the grid. These turbines (the affected turbines) will each have a nominal capacity of 190 MW. As peaking units, the operation of each turbine would be limited to no more 2550 operating hours in any year. The primary fuel for the turbines will be natural gas. The turbine will have the capability to use ultra-low-sulfur diesel (oil) as a secondary or backup fuel. Evaporative cooling will be installed on the turbines to be able to cool the inlet air during warm weather. NOx emissions when burning natural gas will be controlled by Dry Low-NOx (DLN) combustion technology. NOx emissions when burning ultra-low-sulfur diesel will be controlled by a combination of Low-NOx combustion technology and water injection.

2.1.2 Control Technology Determination - BACT

- a. Each affected turbine shall be operated and maintained with the following features to control or reduce emissions:
 - i. NOx: Dry low-NOx combustion technology for natural gas and low-NOx combustion technology and water injection for ultra-low-sulfur diesel.
 - ii. PM, PM₁₀ and PM_{2.5}: Good combustion practices.
 - iii. GHG: Turbine-generator design and proper operation.
- b.
 - i. The NOx emissions of each affected turbine shall not exceed the following limits, expressed in terms of the concentration of NOx in the exhaust, in parts per million by volume (ppmv) in the exhaust, adjusted to 15 percent oxygen, or the alternative limits expressed in terms of fuel heat input to the turbine, in pounds per million Btu (lb/mmBtu), higher heating value. Compliance with these limits shall be determined using the relevant compliance procedures set forth in the New Source Performance Standards, 40 CFR 60 Subpart KKKK, as addressed in Conditions 2.1.8-1, 2.1.8-2 and 2.1.9.
 - A. Natural Gas: 9 ppmv at 15 percent O₂ (equivalent to 0.033 lb/mmBtu, HHV).
 - B. Ultra-Low-Sulfur Diesel: 42 ppmv at 15 percent O₂ (equivalent to 0.164 lb/mmBtu, HHV).
 - ii. Notwithstanding the above, for an affected turbine during commissioning, tuning or an hour that includes a startup or shutdown, the NOx emissions of the affected turbine shall not exceed the applicable limit in Condition 2.1.6(a)(ii).

- c. i. The particulate emissions of each affected turbine shall not exceed the following limits. These limits shall apply as a 3-hour block average, with compliance determined by performance testing in accordance with Condition 2.1.7 and from equipment operation. If test runs are longer than one-hour, the compliance time period during testing shall be the total actual duration of the test runs.

Fuel	Limits (lbs/mmBtu)	
	PM	PM ₁₀ /PM _{2.5}
Natural Gas	0.0038	0.0050
Ultra-Low-Sulfur Diesel	0.015	0.020

- ii. Notwithstanding the above, for an affected turbine during an hour that includes a startup, the particulate emissions of the turbine shall not exceed the applicable limits in Condition 2.1.6(a) (i).

- d. i. The GHG emissions of each affected turbine, as carbon dioxide equivalents (CO₂e), as an annual average of 12 consecutive operating months, rolled monthly, shall not exceed a limit that is calculated as follows. Compliance with this limit shall be determined using the relevant procedures for quantification of GHG emissions in 40 CFR Part 98 Subpart D.

$$E = \{(G_{ng} \times R_{ng}) + (G_{ulsd} \times R_{ulsd})\} \div (G_{ng} + G_{ulsd})$$

Where

E = Limit on GHG emissions, as CO₂e, pounds/MW-hr gross electrical output, annual average, rolled monthly.

G_{ng} = Gross electrical output of the affected turbine-generator from natural gas, in MW-hr, including output in hours when ultra-low-sulfur diesel provides less than 50 percent of the heat input of the turbine.

G_{ulsd} = Gross electrical output, of the affected turbine generator from ultra-low-sulfur diesel, in MW-hr, including output in hours when ultra-low-sulfur diesel provides 50 percent or more of the heat input of the turbine.

R_{ng} = 1367 lb/MW-hr gross output (allowable rate for natural gas).

R_{ulsd} = 1934 lb/MW-hr gross output (allowable rate for ultra-low-sulfur diesel).

- e. For the affected turbines, the Permittee shall implement good air pollution control practices to minimize emissions during startup, including the following:

- i. Operation of the affected turbines and associated air pollution control equipment in accordance with written operating procedures that include startup.

- ii. Inspection, maintenance and repair of the affected turbines and associated air pollution control equipment in accordance with written maintenance procedures.

2.1.3-1 Applicable Federal Emission Standards

- a.
 - i. The affected turbines are subject to the NSPS for Stationary Combustion Turbines, 40 CFR 60 Subpart KKKK, and the General Provisions of the NSPS, 40 CFR Subpart A. The Illinois EPA administers the NSPS for subject sources in Illinois pursuant to a delegation agreement with the USEPA.
 - ii. Pursuant to 40 CFR 60.7(c), 60.4320 and 60.4325 and Table 1 of 40 CFR Subpart KKKK, NO_x emissions from each affected turbine, corrected to 15 percent oxygen (O₂) in the exhaust, shall not exceed the following limits except during periods of startup, shutdown and malfunction, as defined by 40 CFR 60.2. If the total heat input of an affected turbine is greater than or equal to 50 percent natural gas, the turbine must meet the corresponding limit for a natural gas-fired turbine when burning that fuel. Similarly, when the affected turbine's total heat input is greater than 50 percent ultra-low-sulfur diesel, the turbine must meet the corresponding limit for ultra-low-sulfur diesel for the duration of the time that that particular fuel is burned.
 - A. For natural gas, 15 ppm at 15 percent O₂ or 54 ng/J useful output (0.43 lb/MW-hr).
 - B. For ultra-low-sulfur diesel, 42 ppm at 15 percent O₂ or 160 ng/J useful output (1.3 lb/MW-hr).
 - iii. Pursuant to 40 CFR 60.4330(a), SO₂ emissions from each affected turbine shall comply with one of the following limits:
 - A. Emissions shall not exceed 0.90 lbs/MW-hr gross output; or
 - B. The total potential emissions shall not exceed 0.060 lbs SO₂/mmBtu heat input for each fuel fired in the turbine.
 - iv. Pursuant to the NSPS, 40 CFR 60.11(d) and 60.4333, at all times, including periods of startup, shutdown and malfunction, the Permittee must operate and maintain the affected turbines, including associated air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions.
- b. The affected turbines are subject to the NSPS for Greenhouse Gas Emissions for Electric Generating Units, 40 CFR 60 Subpart TTTT.

Pursuant to this NSPS, 40 CFR 60.5520(d)(1), the Permittee shall keep purchase records for the fuels burned in the affected turbines.

2.1.3-2 Applicable State Emission Standards

- a. The affected turbines are subject to 35 IAC 212.123(a), which provides that no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any subject emission unit, except as allowed by 35 IAC 212.123(b) and 212.124.
- b. The affected turbines are subject to 35 IAC 217.706, which provides that no person shall not cause or allow the emissions of NOx into the atmosphere from a subject combustion turbine to exceed 0.25 lbs/mmBtu of actual heat input during each ozone control period, based on a control period average for that unit.
- c. The affected turbines are subject to 35 IAC 214.301, which provides that no person shall cause or allows the emission of SO₂ into the atmosphere from a subject emission unit to exceed 2000 ppm.

2.1.3-3 Applicable Programs for Allowance Trading

- a. The affected turbines are affected units under the Acid Rain Control Program pursuant to Title IV of the Clean Air Act and are subject to certain requirements pursuant to 40 CFR Parts 72, 73 and 75. As affected units under the Acid Rain Program, the Permittee must hold allowances for the SO₂ emissions of the turbines.
- b. The affected turbines qualify as Electrical Generating Units (EGU) for purposes of the Cross State Air Pollution Rule (CSAPR), i.e., 40 CFR Part 97. As such, the Permittee must hold allowances for the NOx and SO₂ emissions of the affected turbines during each calendar year and seasonal control period (NOx only).

2.1.4 Non-Applicability Provisions

- a. This permit is issued based on the affected turbines not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Combustion Turbines, 40 CFR 63 Subpart YYY. This is because this NESHAP only applies to major sources of HAPs and the plant will continue to not be a major source of HAPs with the construction of the affected facility.
- b. Pursuant to 40 CFR 60.4305(b), the affected turbines are not subject to the NSPS for Stationary Gas Turbines, 40 CFR 60 Subpart GG. This is because the affected turbines will be constructed after February 18, 2005, the applicability date of 40 CFR 60 Subpart KKKK.
- c. Pursuant to 40 CFR 60.5520(d)(1) and 60.5525, this permit is issued based on the affected turbines not being subject to an

emission standard under the NSPS for Greenhouse Gas Emissions for Electric Generating Units, 40 CFR 60 Subpart TTTT. This is because the affected turbines, as peaking units, would only potentially be subject to a heat input based limit in Table 2 of 40 CFR 60 Subpart TTTT if natural gas was not their primary fuel.

- d. This permit is issued based on the affected turbines not being subject to 35 IAC 212.321 because this rule cannot reasonably be applied to combustion turbines.

2.1.5 Design and Operational Limits

- a.
 - i. The affected turbines shall only be fired with natural gas and ultra-low sulfur diesel.
 - ii. The sulfur content of the ultra-low-sulfur diesel shall not exceed 15 ppm by weight.
 - iii. Ultra-low-sulfur diesel shall only be fired in the affected turbines for purposes of operational or emissions testing or when the supply of natural gas is constricted, restricted or curtailed.
- b. The rated output of each affected turbine shall not exceed 190 MWe, at ISO conditions.
- c. The annual usage of fuel by the affected turbines, combined, shall not exceed the following limits:
 - i. Total: 9,770,000 mmBtu/year.
 - ii. Ultra-low-sulfur diesel: 1,800,000 mmBtu/year.
- d. The operation of each affected turbine, determined as the time when fuel is flowing to the combustors in the turbines, shall not exceed the following limits:
 - i. Total operation: 2,550 hours/year.
 - ii. Operation on ultra-low-sulfur diesel: 400 hours/year.
- e. The number of startups of the affected turbines, combined, shall not exceed the following limits. For this purpose, if a turbine trips during a startup, a subsequent startup of the turbine that begins within one hour after the trip occurred shall not be counted.
 - i. Total startups: 360/year.
 - ii. Startups on ultra-low-sulfur diesel: 60/year
- f.
 - i. Tuning of the affected turbines shall only be conducted while a turbine is firing natural gas.

- ii. Each affected turbine shall not be tuned for more than 25 hours/year.
- iii. For this purpose, tuning is operation of a turbine for the purpose of calibrating operational instrumentation and adjusting operational programming rather than in response to a demand for electricity.

2.1.6 Emission Limits

- a. The short-term emissions of each affected turbine shall not exceed the following limits:
 - i. Except as provided by Condition 2.1.6(a)(ii) and (iii), the short-term emissions of each affected turbine shall not exceed the following limits:

Pollutant	Limits for Each Fuel (Pounds/Hour)	
	Natural Gas	Ultra-Low-Sulfur Diesel
NOx	64.0	349.0
CO	32.3	72.4
PM	7.5	32.2
PM ₁₀ /PM _{2.5}	10.0	42.7
VOM	3.0	7.0
SO ₂	2.73	3.42
Individual HAP	0.24	1.66
Total HAPs	0.88	2.71

- ii. A. The short-term emissions of NOx, CO and VOM of each affected turbine during startup and shutdown shall not exceed the following limits. Compliance with the limits in pounds/hour shall be determined for each hour that includes a startup or shutdown of a turbine:

Pollutant	Form of Limit	Limits for Each Fuel	
		Natural Gas	Ultra-Low-Sulfur Diesel
NOx	Pounds/hour	110.0	349.0
	Pounds/cycle	110.0	275.0
CO	Pounds/hour	300.0	260.3
	Pounds/cycle	300.0	260.3
VOM	Pounds/cycle	20.8	52.0

- B. Compliance with the limits in pounds/hour shall be determined for each hour that includes a startup or shutdown of a turbine. For this purpose, a startup begins when the flow of fuel to a turbine starts. A startup ends, for natural gas, 10 minutes after transition to dry low NOx combustion, for ultra-low-sulfur diesel, 10 minutes after beginning water

injection, or if earlier, 40 minutes after first firing fuel in the turbine or when the startup is terminated. On natural gas, a shutdown begins when the firing rate on a turbine falls below the firing rate necessary for dry low NOx combustion. For ultra-low-sulfur diesel, a shutdown begins when the firing rate in a turbine falls below the firing rate necessary for water injection. A shutdown period ends when fuel is no longer combusted in the turbine.

- C. Compliance with the limits in pounds/cycle shall be determined for the combination of the startup of a turbine and the subsequent shutdown of the turbine, not considering the intervening operation of the turbine between startup and shutdown.
- iii. During commissioning and during tuning of a turbine on natural gas, NOx emissions shall not exceed 106.7 pounds/hour and 15 ppmvd at 15 percent O₂.
- iv. For the purpose of Conditions 2.1.6(a)(i), (ii) and (iii), if an affected turbine fires both natural gas and ultra-low-sulfur diesel during an hour, compliance with the hourly emission limits shall be determined as follows
 - A. On a weighted basis using the percentage of the heat input provided by natural gas and by ultra-low-sulfur diesel. For example, for purpose of Condition 2.1.6(a)(i), if during an hour, each fuel provides half the heat input to the turbine, the limit for NOx would be 206.5 lb/hr $[(0.5 \times 64.0 \text{ lb/hr}) + (0.5 \times 349.0 \text{ lb/hr}) = 206.5 \text{ lb/hr}]$.
 - B. Notwithstanding the above, if both natural gas and ultra-low-sulfur diesel are both fired during an hour that includes a startup, the limits for ultra-low-sulfur diesel shall apply.
- b. As a general matter, compliance with the limits for NOx and CO emissions in Condition 2.1.6(a) and (b) shall be determined by testing and monitoring in accordance with the NSPS. Compliance with the emission limits in these conditions for other pollutants shall be determined in order of priority, using appropriate emission factors reflecting actual operation of the turbines, which shall be derived from emission testing conducted in accordance with Condition 2.1.7-1, manufacturer's data, or standard emission factors.
- c. The annual emissions of the affected turbines, combined, shall not exceed the following limits:

Pollutant	Limits (tons/year)
NOx	277.0
CO	96.2
VOM	13.0
PM	28.6
PM ₁₀ /PM _{2.5}	38.1
SO ₂	6.9
GHG, as CO ₂ e	608,919
Individual HAP	0.7
Total HAPs	3.0

2.1.7-1 Requirements for Performance Testing

- a. Pursuant to the NSPS, 40 CFR 60.8, the Permittee shall have initial performance tests conducted for the affected turbines for emissions of NOx and SO₂ in accordance with 40 CFR 60.8 using applicable methods and procedures specified by 40 CFR 60.4400 and 60.4415.
- b. The Permittee shall have tests conducted for each of the turbines as follows at its expense by an approved testing service. These tests shall be conducted while the subject turbine is operating in its maximum operating range and other representative operating conditions.
 - i. This testing shall be conducted by the following dates:
 - A. Initial testing shall be conducted within 180 days of the initial startup of an affected turbine. For this purpose, testing shall be conducted on each affected turbine for emissions of VOM, PM, PM₁₀/PM_{2.5}, HAPs (formaldehyde), N₂O and CH₄, with separate testing conducted for firing of natural gas and ultra-low-sulfur diesel.
 - B. Thereafter, until a CAAPP permit is issued that addresses periodic testing of the affected turbines periodic testing of the turbine shall be conducted on one of the turbines as follows, For this purpose, testing shall be conducted for VOM, PM, PM₁₀/PM_{2.5} and HAPs (formaldehyde) unless the initial testing of both turbines shows emissions of the pollutant that are 70 percent or less than the applicable permit limit. The turbine on which testing is conducted shall be specified by the Illinois EPA or otherwise selected randomly:
 - I. Testing while firing natural gas shall be conducted within five years of the previous test.

II. Testing while firing ultra-low-sulfur diesel shall be conducted within five years of the previous test unless neither turbine has operated for more than 500 hours on ultra-low-sulfur diesel since the previous test, in which case, testing shall be conducted in the calendar year following the year in which operation of a turbine on ultra-low-sulfur diesel first exceeds 500 hours.

ii. If visible emissions are typically present from an affected turbine when firing a fuel, the Permittee shall also conduct observations for opacity by Method 9 during the emission tests for PM emissions for firing that fuel required by Condition 2.1.7-1(b)(i).

iii. For purposes of this testing, the following methods and procedures shall be used unless other methods adopted by or being developed by USEPA are specified or approved by the Illinois EPA.

VOM	Method 18, 25A or 320
NOx	Method 7E
PM (filterable)	Method 5
PM (condensable)	Method 202
PM ₁₀ /PM _{2.5} (filterable)	Method 201A
N ₂ O and CH ₄	Method 320
Formaldehyde	Method 320 or 323

iv. Test plans, test notifications, and test reports shall be submitted to the Illinois EPA Air Compliance Section in accordance with Conditions 3.1(a), (b) and (c). In addition to other required information, if test runs that are longer than one-hour in duration are planned, the expected duration of the runs and the reason for extended runs shall be explained.

c. Testing of affected turbine(s) shall also be conducted following a written request by the Illinois EPA for pollutants as specified in the request, with such testing conducted either within 60 days, the date that a turbine next operates or on the date agreed to by the Illinois EPA, whichever is later.

2.1.7-2 Opacity Observations Requirements

a. The Permittee shall have the opacity of the emissions from each affected turbine during representative operating conditions determined by a qualified observer in accordance with USEPA Method 9, as further specified below.

i. Within 180 days of initially operating the affected turbine, the Permittee shall have opacity observations conducted for both firing of natural gas and of ultra-low-sulfur diesel.

- ii. At least every five year calendar years thereafter, the Permittee shall have opacity observations conducted for the turbine for both firing of natural gas and of ultra-low-sulfur diesel, provided, however, that such observations shall not be required for a fuel if visible emissions are not present in the exhaust from the turbine as determined by the Permittee with observations by USEPA Method 22. For this purpose, observations for visible emissions shall be conducted in the calendar year and in each of the four preceding calendar years, except that observations are not required in a particular calendar year for firing ultra-low-sulfur diesel if it was not fired in that year.
 - iii. Upon written request by the Illinois EPA, observations of the opacity of an affected turbine shall be conducted within 60 calendar days of the request, on the date that the turbine next operates for more than 30 minutes, or by the date agreed upon by the Illinois EPA, whichever is latest.
- b. The duration of required observations shall be as follows;
- i. The duration of required observations of opacity shall be at least 30 minutes (five 6-minute averages) unless the average opacities for the initial 12 minutes of observation (two six-minute averages) are both less than 5.0 percent.
 - ii. The duration of required observations for visible emissions shall be at least 15 minutes.
- c. i. For the observations of opacity required by Condition 2.1.7-2(a), the Permittee shall submit a written report within 30 days of the date of observation, which report shall include the following information:
- A. Date and time of observation.
 - B. Name and employer of qualified observer.
 - C. Copy of current certification.
 - D. Description of observation conditions.
 - E. Description of the fuel being fired and other operating conditions of the affected turbine.
 - F. Raw data.
 - G. Opacity determinations.
 - H. Conclusions.

- ii. If observations of opacity were not conducted pursuant to Condition 2.1.7-2(a)(ii) because visible emissions were not present in the exhaust of the turbine, a report shall be submitted following the final observations for visible emissions in the fifth calendar year and, for each of the five required annual observations for visible emissions, include the name(s) of the observer(s) and the information specified in Condition 2.1.7-2(c)(i)(A), (D), (E) and (H).

2.1.8-1 Emission Monitoring Requirements

- a. i. For each affected turbine, the Permittee shall calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) for NOx emissions in accordance with the applicable monitoring requirements of 40 CFR 60.4340(b)(1), the federal Acid Rain Program, 40 CFR Part 75, and the Cross State Air Pollution Rule, 40 CFR 96 Subpart HHH.
- ii. For the affected turbines, this monitoring for NOx emissions conducted above shall also be used to determine compliance with the limits for NOx emissions in Condition 2.1.6(a) and (b), except that the provisions for substitution of missing data need not be used.
- b. For each affected turbine, the Permittee shall calibrate, maintain, and operate a CEMS for CO emissions in accordance with the relevant monitoring requirements of 40 CFR 60.13. Quality assurance for these CEMS shall be in accordance with to 40 CFR Part 75, Appendix B, Quality Assurance and Control Procedures.
- c. In addition to meeting relevant regulatory requirements for NOx and CO, the CEMS required by Condition 2.1.8-1(a) and (b) shall be equipped and operated as "dual range" monitors if it is necessary to provide credible emission data during startup and shutdown of the turbine.

2.1.8-2 Fuel Sampling and Analysis Requirements

- a. The Permittee shall determine the total sulfur content of the fuels combusted in the affected turbines in accordance with 40 CFR 60.4360, 60.4365 and 60.4370.
- b. The Permittee shall keep records for this sampling and analysis activity, including both collected data and documentation for the sampling and analysis activities. The Permittee may use representative sampling and analytical results from the fuel supplier(s) to demonstrate compliance with fuel sulfur content.

2.1.9 Recordkeeping Requirements

- a. i. For the affected turbines, the Permittee shall comply with the applicable recordkeeping requirements of the NSPS, 40 CFR 60 Subparts A, KKKK and TTTT.

- ii. For the affected turbines, the Permittee shall comply with the applicable recordkeeping requirements of 35 IAC 217.712.
- b. For the affected turbines, the Permittee shall maintain a file or other records for the affected turbines that include:
 - i. The manufacturer's data for the affected turbines, including emissions guarantees, horsepower or rated heat input capacity (mmBtu/hour), and operating and maintenance procedures suggested by the manufacturer.
 - ii. The Permittee's established startup procedures for the affected turbines.
- c. The Permittee shall maintain the following records for the affected turbines:
 - i. An operating log that includes the information specified by Condition 3.2(a), and identifies the operating mode for each hour of operation (i.e., cold weather, or very cold weather).
 - ii. An inspection, maintenance, and repair log that includes the information specified by Condition 3.2(b).
- d. The Permittee shall maintain the records for the following information for each affected turbine:
 - i. The following information related to fuel usage (mmBtu/month and mmBtu/year):
 - A. Usage of natural gas.
 - B. Usage of ultra-low-sulfur diesel (oil).
 - C. Total fuel usage.
 - ii. The following information related to operating hours (hours/month and hours/year):
 - A. Total number of hours of operation.
 - B. Total number of hours of operation when firing ultra-low-sulfur diesel.
 - iii. The following information related to startups (startups/month and startups/year):
 - A. Total number of startups.
 - B. Total number of startups on ultra-low-sulfur diesel.
 - iv. The following information related to tuning:

- A. Total number of minutes per tuning event.
 - B. The total duration of tuning (hours/month and hours/year).
- v. The following information related to electrical output from the associated generator (MW-hr/month and MW-hr/ year):
 - A. Output from firing natural gas in the turbine.
 - B. Output from firing ultra-low-sulfur diesel in the turbine.
 - C. Total output.
- e. The Permittee shall maintain records of the following information for the emissions of the affected turbines:
 - i. The emissions of NOx and CO of the affected turbines based on the CEMS (tons/month and tons/year).
 - ii. The CO2 emissions of the affected turbines based on the operational monitoring for fuel consumption (tons/month and tons/year), with supporting calculations.
 - iii. For emissions of NOx, PM, PM10/PM2.5, SO2, VOM, N2O, CH4 and HAPs, a file containing the maximum hourly emission rates and the emission rates used by the Permittee to determine the emissions of the affected turbines for natural gas and ultra-low-sulfur diesel, with supporting documentation.
 - iv. The emissions of PM, PM10/PM2.5, SO2, VOM, and HAPs of the affected turbines (tons/month and tons/year), with supporting documentation and calculations.
 - v. For each affected turbine for GHG emissions:
 - A. The GHG emissions of the turbine, as CO₂e, considering emissions of CO₂, N₂O and CH₄ (tons/month and tons/year), with supporting documentation and calculations.
 - B. The GHG emissions of the each affected turbine, as CO₂e, in lbs/MW-hr, annual average.

2.1.10 Notification and Reporting Requirements

- a. For the affected turbines, the Permittee shall comply with the applicable notification and reporting requirements of the NSPS, 40 CFR 60 Subparts A and KKKK.

- b. For the affected turbines, the Permittee shall comply with the applicable reporting requirements of 35 IAC 217.712.

PART 2.2: UNIT-SPECIFIC CONDITIONS FOR THE FUEL HEATER**2.2.1 Description**

The fuel heater (the affected fuel heater) will burn natural gas. This heater will be used to indirectly heat natural gas fuel for the affected turbines. This is necessary to counteract the cooling that occurs when the pressure of the gas is reduced to the level needed for the fuel supply to the combustion turbines.

2.2.2 Control Technology Determination (BACT)

- a. For NO_x, the affected fuel heater shall be designed and operated to comply with a limit of 0.033 lb/mmBtu, on a 3-hour average.
- b. The emissions of PM and PM₁₀/PM_{2.5} from the affected fuel heater shall each not exceed 0.105 pounds/hour, on a 3-hour average.
- c. The GHG emissions of the affected fuel heater, as CO₂e, shall not exceed 1,836 tons/year.

2.2.3-1 Applicable Federal Emission Standards

- a. The affected unit is subject to the NSPS for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subpart Dc, and applicable requirements of the General Provisions of the NSPS, 40 CFR 60 Subpart A.
- b. Pursuant to the NSPS, 40 CFR 60.11(d), at all times the Permittee shall, to the extent practicable, maintain and operate the affected fuel heater in a manner consistent with good air pollution control practices for minimizing emissions.

2.2.3-2 Applicable State Emission Standards

- a. Pursuant to 35 IAC 212.123(a), the opacity of the exhaust from the affected fuel heater shall not exceed 30 percent, except as provided by 35 IAC 212.123(b).
- b. The affected fuel heater is subject to 35 IAC 216.121, which provides that no person shall cause or allow the emission of CO into the atmosphere from any subject fuel combustion emission unit to exceed 200 ppm, corrected to 50 percent excess air.

2.2.4 Non-applicability Provisions

- a. This permit is based on the affected fuel heater not being subject to the federal NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63 Subpart DDDDD (the Boiler NESHAP). This is because the plant is not a major source for emissions of HAPs.
- b. This permit is based on the affected fuel heater not being subject to the NESHAP for Industrial, Commercial, and

- Institutional Boilers Area Sources, 40 CFR 63 Subpart JJJJJJ, because the NESHAP does not apply to process heaters.

2.2.5 Operational Requirements

- a. Natural gas shall be the only fuel fired in the affected fuel heater.
- b. The rated heat input capacity of the affected fuel heater shall not exceed 15.0 mmBtu/hour.
- c. The usage of natural gas in the affected fuel heater shall not exceed 30.4 million scf/year.

2.2.6 Emissions

- a. The emissions from the affected unit shall not exceed the following limits:

Pollutant	Limit	
	lb/hr	ton/year
NOx	0.40	0.5
CO	0.44	0.5

- b. This permit is issued based on minimal emissions of PM, PM₁₀/PM_{2.5}, VOM, SO₂ and HAPs from the affected unit, i.e., the total emissions of PM/PM₁₀/PM_{2.5}, VOM, HAP and SO₂ from the affected fuel heater each being no more than 0.1 tons/year.
- c. This permit is issued based on GHG emissions from each affected fuel heater, calculated as CO₂e, being no more than 1,836 tons/year.

2.2.7 Recordkeeping Requirements

- a. The Permittee shall maintain the following records for the affected fuel heater:
 - i. A file containing the following maximum design heat input capacity (mmBtu/hour), with supporting documentation, if this information is not provided by the nameplate attached to the unit.
- b. An inspection, maintenance, repair and operating log or other records for this unit that, at a minimum, shall include the following information:
 - i. Information for each startup and shutdown, including date, time and duration, as required by 40 CFR 60.7(b).
 - ii. Information for any incident in which the operation of this unit continued during malfunction or breakdown, as required by 40 CFR 60.7(b). These records shall include date, time, and duration; a description of the incident; whether

emissions exceeded or may have exceeded any applicable standard; a description of the corrective actions taken to reduce emissions and the duration of the incident; and a description of the preventative actions taken.

- iii. An inspection, maintenance, and repair log with dates and the nature of such activities for this unit.
- iv. Records for the amount of fuel combusted on a calendar month basis, pursuant to 40 CFR 60.48c(g).
- c. The Permittee shall keep records for the amount of natural gas fired by the affected fuel heater (million scf/month and million scf/year).
- d. The Permittee shall keep the following records related to emissions of NOx and CO of the affected unit (tons/month and tons/year), with supporting calculations:
 - i. A file containing a determination of the maximum emission rates of each pollutant with supporting documentation (lb/mmBtu and lb/hour).
 - ii. Records of actual emissions of each pollutant (tons/month and tons/year), with supporting calculations.

2.2.8 Notification and Reporting Requirements

- a. Pursuant to 40 CFR 60.7(a)(3) and 60.48c(a), the Permittee shall furnish the Illinois EPA with written notification as follows with respect to commencement of construction and operation of the affected fuel heater, which notification shall be accompanied by the following information:
 - i. The design heat input capacity of the unit and identification of the fuels to be combusted in the affected unit, pursuant to 40 CFR 60.48c(a)(1).
 - ii. The annual capacity factor at which the Permittee anticipates operating the affected unit based on fuel fired, pursuant to 40 CFR 60.48c(a)(3).
- b. For the affected fuel heater, the Permittee shall notify the Illinois EPA, of deviations from the permit requirements, in accordance with Condition 3.4.

PART 3: GENERAL PERMIT CONDITIONS

CONDITION 3.1: GENERAL REQUIREMENTS FOR EMISSION TESTING

- a.
 - i. Except as provided below, by Condition 3.1(a)(ii), at least 60 days prior to the actual date of emission testing required by this permit, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing and shall include at a minimum:
 - A. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - B. The specific conditions, e.g., operating rate and control device operating conditions, under which testing shall be performed including a discussion of why these conditions will be representative and the means by which the operating parameters will be determined.
 - C. The specific determinations of emissions that are intended to be made, including sampling and monitoring locations.
 - D. The test method(s) that will be used, with the specific analysis method if the method can be used with different analysis methods.
 - ii. As provided by 35 IAC 283.220(d), the Permittee need not submit a test plan for emissions testing that will be conducted in accordance with the procedures used for previous tests accepted by the Illinois EPA or the previous test plan submitted to and approved by the Illinois EPA, provided that the Permittee's notification for testing, as required below, contains the information specified by 35 IAC 283.220(d)(1)(A), (B) and (C).
- b.
 - i. The Permittee shall notify the Illinois EPA prior to performing emissions testing required by this permit to enable the Illinois EPA to observe the tests. Notification for the expected date of testing shall be submitted a minimum of 30 days prior to the expected date, and identify the testing that will be performed. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of testing. Notwithstanding 40 CFR 60.8(d), the Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.
 - ii. This notification shall also identify the parties that will be performing testing and the set or sets of operating conditions under which testing will be performed.
- c. Three copies of the Final Reports for emission tests shall be forwarded to the Illinois EPA within 30 days after the test results are compiled and finalized but not later than 90 days after the date

of testing. At a minimum, the Final Report for testing shall contain the following.

- i. General information
 - ii. A tabular summary of results which includes:
 - Process rates (e.g., fuel rates, firing rate and output in MW-hr).
 - Measured emission rates for different pollutants tested
 - Emission factor, calculated using the average test results in the terms of the applicable limits, for example, in units of lbs pollutant emitted per mMBtu and MW-hr.
 - Compliance demonstrated - Yes/No
 - iii. Description of test method(s) and procedures, including a description of sampling points, sampling train, analysis equipment, and test schedule;
 - iv. Detailed description of test conditions, including:
 - Pertinent process information (e.g., usage of fuel and composition.)
 - Control equipment information (i.e., monitored data and other relevant operating parameters during testing).
 - v. Data and calculations, including copies of all raw data sheets and records of laboratory analysis, sample calculations, and data on equipment calibration.
 - vi. The results of all quality control evaluations, with a copy of all qualified data.
- d. Records of the initial performance test, including operating parameters monitored during the test, shall be kept for the life of the unit. Records of subsequent tests shall be maintained for a minimum of five years.

CONDITION 3.2: GENERAL REQUIREMENTS FOR "LOGS" OR SIMILAR RECORDS

- a. Operating logs or other similar records required by this permit shall, at a minimum, include the following information related to the emission units and associated control system:
 - i. Information identifying periods when an emission unit or group of related emission units was not in service.
 - ii. For periods when a unit or group of related units is in service and operating normally, relevant process and control system information to generally confirm normal operation.

- iii. For periods when a unit or group of related units is in service and is not operating normally, identification of each such period, with detailed information describing the operation of the unit(s), the potential consequences for additional emissions from the unit(s), the potential of any excess emissions from the affected unit(s), the actions taken to restore normal operation, and any actions taken to prevent similar events in the future.
 - iv. Other information as may be appropriate to show that the emission unit or group of related emission units is operated in accordance with good air pollution control practices.
- b. Inspection, maintenance and repair logs or other similar information required by this permit shall, at a minimum, include the following information related to the emission units and associated control system:
- i. Identification of equipment, with date, time, responsible employee and type of activity.
 - ii. For inspections, a description of the inspection, findings, and any recommended actions, with reason.
 - iii. For maintenance and repair activity, a description of actions taken, reason for action (e.g., preventative measure or corrective action as a result of inspection), probable cause for requiring maintenance or repair if not routine or preventative, and the condition of equipment following completion of the activity.
 - iv. Other information as may be appropriate to show that the emission unit or group of related emission units is maintained in accordance with good air pollution control practices, including prompt repair of defects that interfere with effective control of emissions.
- c. The logs required by this permit may be kept in manual or electronic form, and may be part of a larger information database maintained by the Permittee provided that the information required to be kept in a log is readily accessible.

CONDITION 3.3: GENERAL REQUIREMENTS FOR RECORDKEEPING FOR DEVIATIONS

Except as specified in a particular provision of this permit or in a subsequent CAAPP Permit for the plant, records for deviations from applicable requirements shall include at least the following information: the date, time and estimated duration of the deviation; a description of the deviation; the manner in which the deviation was identified, if not readily apparent; the probable cause for deviation, if known, including a description of any equipment malfunction or breakdown associated with the deviation; information on the magnitude of the deviation, including actual emissions or performance in terms of the applicable standard if measured or readily estimated; confirmation that standard procedures were followed or a description of any

event-specific corrective actions taken; and a description of any preventative measures taken to prevent future occurrences, if appropriate.

CONDITION 3.4: GENERAL REQUIREMENTS FOR REPORTING OF DEVIATIONS

- a. The Permittee shall include the following information in records and reports for deviations:
 - i. Identity of the deviation, with date, time, duration and description.
 - ii. Describe the effect of the deviation on compliance, with an estimate of the excess emissions that accompanied the deviation, if any.
 - iii. Describe the probable cause of the deviation and any corrective actions or preventive measures taken.
- b.
 - i. Unless otherwise specified in a particular condition of this permit, if deviation(s) from requirements of this permit occurs during a reporting period, a compliance report shall be submitted no later than 45 days after the end of the reporting period. This report shall also provide a listing of all deviations for which immediate or 30-day reporting was required, but need not include copies of the previously submitted information.
 - ii. If there are no deviations during a reporting period, the Permittee shall still submit a compliance report, which report shall state that no deviations occurred during the reporting period.
- c.
 - i. For the purpose of determining whether a deviation must be reported prior to a periodic compliance report, a deviation shall be considered to continue even if operation of an emission unit is interrupted if the deviation is still present when operation of the unit is resumed.
 - ii. When this permit requires immediate notification, such notification shall be provided by telephone and followed by facsimile or e-mail transmittal of a narrative report.
- d. Upon issuance of a CAAPP permit for the affected facility, the provisions of the CAAPP permit with respect to reporting of deviations will supersede the requirements of this permit for reporting of deviations.

ATTACHMENT 1:

Summary of Permitted Annual Emissions of the Affected Facility (Tons/Year)

Pollutant	Turbines	Fuel Heater	Storage Tanks	Total
NOx	277.0	0.5	---	277.5
CO	96.2	0.5	---	96.7
VOM	13.0	0.1	0.10	13.2
SO ₂	6.9	0.1	---	7.0
PM	28.7	0.1	---	28.8
PM ₁₀ /PM _{2.5}	38.1	0.1	---	38.2
GHG, as CO ₂ e	608,919	1836	---	610,755
Individual HAP	0.7	0.1	---	0.8
Total HAPs	3.0	0.1	---	3.1

ATTACHMENT 2: STANDARD PERMIT CONDITIONSSTANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS
ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Illinois Environmental Protection Agency to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special condition(s).

1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.
2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act and Regulations adopted by the Illinois Pollution Control Board.
3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, has been submitted to the Illinois EPA and a supplemental written permit issued.
4. The Permittee shall allow any duly authorized agent of the Illinois EPA, upon the presentation of credentials, at reasonable times:
 - a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit;
 - b. To have access to and to copy any records required to be kept under the terms and conditions of this permit;
 - c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit;
 - d. To obtain and remove samples of any discharge or emissions of pollutants; and
 - e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

5. The issuance of this permit:
- a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located;
 - b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities;
 - c. Does not release the Permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations;
 - d. Does not take into consideration or attest to the structural stability of any units or parts of the project; and
 - e. In no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
- 6a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Illinois EPA before the equipment covered by this permit is placed into operation.
- b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.
7. The Illinois EPA may file a complaint with the Board for modification, suspension or revocation of a permit,
- a. Upon discovery that the permit application contained misrepresentations, misinformation or false statement or that all relevant facts were not disclosed; or
 - b. Upon finding that any standard or special conditions have been violated; or
 - c. Upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.

July, 1985, Revised, May, 1999

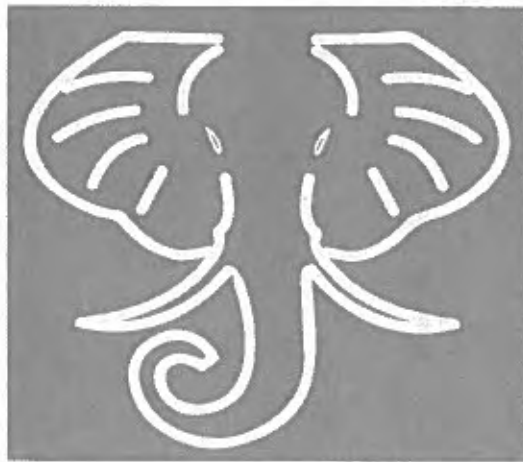
EXHIBIT C

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STANDARD INDUSTRIAL CLASSIFICATION MANUAL

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EXECUTIVE OFFICE OF THE PRESIDENT.
71.1 OFFICE OF MANAGEMENT AND BUDGET.
Statistical Policy Division

STANDARD INDUSTRIAL CLASSIFICATION MANUAL

1972

PREPARED BY THE STATISTICAL POLICY DIVISION

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Preface

The Standard Industrial Classification Manual (SIC) is one of the most important tools that has been developed to promote the comparability of statistics describing various facets of the economy of the Nation. The SIC defines industries in accordance with the composition and structure of the economy and covers the entire field of economic activities. It is revised periodically to reflect the changing industrial composition of the economy. The present revision is the first major one since 1957.

Developed initially for use within Government for statistical purposes, the SIC is now widely used by individual business firms for classification of their customers and suppliers in market research, as well as by non-Government research and business organizations, and trade and professional associations which compile statistics supplementing those provided by Federal agencies.

Industrially classified statistics are used not only to show how industries which comprise the economy have done over the past years, but to indicate the emerging and rapidly growing industries. For the first use, statistics need to be comparably classified over an extended period of time, a requirement which would best be met by making no changes at all in the SIC. For the second use, however, comprehensive and frequent changes should be made to keep abreast of the industrial composition and structure of the economy as it currently exists. We have tried to prepare this edition of the Manual to obtain optimum advantages of both constancy—providing for comparability in most industries—and currency—recognizing important changes in industry—while still applying objectively the criteria for recognizing industries stated in Appendix D.

Over 100 proposals for changes were submitted for this revision, most of them from persons and organizations outside Government. Many covered a Major Group or Division of the SIC and were the result of coordination or synthesis of views of representatives of a broad spectrum of industry. All proposals were evaluated by the Inter-agency Technical Committee on Industrial Classification, chaired by Milo Peterson of this Division, who was also the OMB staff member primarily responsible for producing the Manual from the recommendations of the Technical Committee. Cynthia Wiggins provided invaluable help in preparing the Manual, especially in writing descriptions of industries, preparing manuscripts, coordinating comments, and overseeing the proof-reading. The entire undertaking was carried out under the general supervision of Paul F. Krueger, Deputy Chief of the Division.

We wish to thank the Technical Committee (listed below) and the over 100 additional persons in the Government who contributed directly to this effort. We also want to thank a substantially larger number of individuals outside Government who made

important contributions directly or through various groups which coordinated many differing points of view before presenting them to this office. Also, many trade associations and unions contributed by informing their constituents about the project and how to go about submitting proposals and formulating specific proposals.

We wish specifically to acknowledge the assistance given by the Business Advisory Council on Federal Reports and its Committee on Industrial Classification chaired by Richard McNabb; the American Marketing Association and its SIC Review Committee chaired by Edward Bloom; the Federal Statistics Users' Conference; the Labor Advisory Committee; and the Advisory Commission on Intergovernmental Relations.

The work of all of these individuals and organizations helped significantly to make our job of preparing this revision of the SIC Manual a manageable one. We are grateful for their assistance and advice. However, we in the Office of Management and Budget are responsible for final decisions on the content of the volume.

JULIUS SHISKIN,
Chief, Statistical Policy Division

Technical Committee on Industrial Classification

MILO O. PETERSON, Office of Management and Budget, *Chairman*

ROBERT S. BARKER, Bureau of Labor Statistics (JOSEPH E. JAMES and DONALD W. RUNDQUIST, *alternates*)

ARTHUR BERGER, Bureau of Mines (FRITZ KAFKA, *alternate*)

SIGMUND BERKMAN, Manpower Administration

DAVID N. COHEN, Bureau of Domestic Commerce (RUTH KNAPE, *alternate*)

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JACK GOTTSCHEN, Bureau of Economic Analysis

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LUCILLE M. STEVENS, Department of Agriculture

ROBERT TORENE, Board of Governors of the Federal Reserve System (JAMES MOYERS, from July 1971)

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Introduction

The Standard Industrial Classification of Establishments

Purpose and Scope of the Classification

The Standard Industrial Classification was developed for use in the classification of establishments by type of activity in which they are engaged; for purposes of facilitating the collection, tabulation, presentation, and analysis of data relating to establishments; and for promoting uniformity and comparability in the presentation of statistical data collected by various agencies of the United States Government, State agencies, trade associations, and private research organizations. The Standard Industrial Classification for *establishments* differs from a classification for *enterprises* or companies. A Standard Enterprise Classification related to the Standard Industrial Classification has been developed for use in classifying enterprises. Other classifications have been developed for use in the classification of commodities or products and also for occupations.

The Standard Industrial Classification is intended to cover the entire field of economic activities: agriculture, forestry, fishing, hunting, and trapping; mining; construction; manufacturing; transportation, communication, electric, gas, and sanitary services; wholesale and retail trade; finance, insurance, and real estate; personal, business, repair, and other services; and public administration.

This edition of the Manual supersedes the 1967 edition.

Principles of the Classification

In preparing the Classification, the Technical Committee on Industrial Classification was guided by the following general principles:

- (1) The Classification should conform to the existing structure of American industry.
- (2) Each establishment is to be classified according to its primary activity.
- (3) To be recognized as an industry, the group of establishments constituting the proposed classification must be statistically significant in the number of persons employed, the volume of business done, and other measures of economic activity.

Appendix D describes in more detail the principles and procedures used for this revision.

Definition of Establishments.—For purposes of this classification, an establishment is an economic unit, generally at a single physical location where business is conducted or where services or industrial operations are performed. (For example: a factory, mill, store, hotel, movie theater, mine, farm, ranch, bank, railroad depot, airline terminal, sales office, warehouse or central administrative office.)

Where distinct and separate economic activities are performed at a single physical location (such as construction activities operated out of the same physical location as a lumber yard), each activity should be treated as a separate establishment wherever (1) no one industry description in the classification includes such combined activities; (2) the employment in each such economic activity is significant; and (3) reports can be prepared on the number of employees, their wages and salaries, sales or receipts, and other establishment type data.

For activities such as construction, transportation, communications, electric, gas, and sanitary services, and similar physically dispersed operations, establishments are represented by those relatively permanent main or branch offices, terminals, stations, etc., which are either (1) directly responsible for supervising such activities, or (2) the base from which personnel operate to carry out these activities. Hence, the individual sites, projects, fields, networks, lines or systems of such dispersed activities are not ordinarily considered to be establishments.

An establishment is not necessarily identical with the enterprise or company which may consist of one or more establishments. Also, it is to be distinguished from subunits, departments, or divisions. Supplemental interpretations of the definition of an establishment are included in the industry descriptions of the Standard Industrial Classification where appropriate. Central administrative offices and auxiliary units described below are recognized as special types of establishments.

Central Administrative Offices and Auxiliary Units.—A central administrative office is an establishment primarily engaged in management and general administrative functions performed centrally for other establishments of the same company.

An auxiliary unit is an establishment primarily engaged in performing supporting services for other establishments of the same company rather than for the general public or for other business firms.

See Appendix A for more detailed descriptions of central administrative offices and auxiliary establishments.

Structure of the Classification

The structure of the classification makes it possible to tabulate, analyze, and publish establishment data on a division, a two-digit, a three-digit, or a four-digit industry code basis, according to the level of industrial detail considered most appropriate. An agency may use additional subdivisions within specific four-digit industries in adopting this classification for its own use, while still retaining comparability with the classifications used by other agencies.

It should be noted that the digit "9" that usually appears in the third or fourth-digit position of the classification code designates miscellaneous three-digit groups or four-digit industries covering establishments "not elsewhere classified." These residual establishments do not usually constitute homogeneous primary activity groups; for pur-

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poses of this classification system they are grouped together and treated as a separate industry to retain the homogeneity of the other industries in the group.

Change in the Treatment of Ownership Characteristics.—The classification has been changed so that all establishments primarily engaged in the same kind of economic activity are classified in the same four-digit industry, regardless of their types of ownership; hence, their owners may include such diverse legal organizations as corporations, partnerships, individual proprietors, government agencies, joint ventures, etc.

This change from the 1967 edition removes "Government" as an industry division, per se, and treats it as an ownership characteristic. Government establishments, therefore, are now classified by their primary economic activity, rather than by type of owner. The ownership classification system shown below can provide continuity between the 1967 Standard Industrial Classification and the present one.

Where applicable, at least summary data should be published separately for the private and Government establishments constituting an industry or industry group. If available, these two major ownership sectors may be further subdivided by the following classification system:

Sector I. Government**Federal**

Regular government

Quasi-government*

State

Regular government

Quasi-government*

Local

Regular government

County

City, town, village, or township

School districts

Special districts

Quasi-government*

International government or foreign government

Sector II. Private**Corporation**

Profit

Nonprofit (except cooperatives)

Cooperative or mutual association (incorporated or not)

Partnership

Sole proprietorship

Other—estate, receivership, joint venture, investment trust, fiduciary trust, etc.

*Quasi-government includes those establishments which are controlled by the government and private sectors through joint ownership of stock or joint membership on boards of directors or other controlling bodies.

Basis of Code Assignment

Each establishment is assigned an industry code on the basis of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Ideally, the principal product or service should be determined by its relative share of "value added" at the establishment. In practice, however, it is rarely possible to obtain this measure for individual products or services; typically, it is necessary to adopt some other criterion which may be expected to give approximately the same results in determining the primary activity of an establishment. It is recommended, therefore, that, when available, the following data measures be used for each of the major economic sectors in assigning industry codes:

<i>Division</i>	<i>Data measure</i>
Agriculture, forestry, and fishing, hunting, and trapping (except agricultural services).	Value of production.
Mining.....	Value of production.
Construction.....	Value of production.
Manufacturing.....	Value of production.
Transportation, communication, electric, gas, and sanitary services.	Value of receipts or revenues.
Wholesale trade.....	Value of sales.
Retail trade.....	Value of sales.
Finance, insurance, and real estate.....	Value of receipts.
Services (including agricultural services)...	Value of receipts or revenues.
Public administration.....	Employment or payroll.

Occasionally, in activity-diversified establishments, the appropriate measure cannot be determined or estimated for each product or service. In some instances, an industry classification based upon the recommended output measure will not represent adequately the relative economic importance of each of the varied activities carried on at such establishments. In such cases, employment or payroll information should be used to determine the primary activity of the establishments.

Even though a data collecting organization may have no immediate need to analyze or publish establishment data at the four-digit industry level of classification, it may nevertheless be useful to assign four-digit codes to each establishment report wherever the information is available and the incremental cost of such classification is not excessive. The four-digit code assignment should be made directly on the basis of the primary products, services, or activities reported by each establishment at the four-digit industry level of detail. It is possible for the classification of an establishment, based on its primary activity at the two- or three-digit level, to differ from that assigned on the basis of its primary activity at the four-digit level.¹

¹ This can occur where the primary activity of an establishment is classified in the four-digit industry of one group that is not as large as the combined activity of two or more four-digit industries within another group. (Note, however, that if subindustries are used, the code assignment should be made on the basis of the primary activity within the assigned four-digit industry.)

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Four-digit code assignment is also helpful in determining comparability with codes previously assigned from earlier editions of the Manual. In this revision, for example, Industry Group 209—Miscellaneous Foods and Kindred Products—was changed by a shifting of some four-digit industries into this Group and others out of it. Therefore, if four-digit codes were assigned previously, reclassification would not be necessary to provide comparable historical data for that Industry Group on the revised basis. Before the classification is limited to less than the four-digit detail, consideration should also be given to possible expansion of the industry data needs, as well as to editing and special analysis needs of certain data series for which more detail would be helpful.

Part I

**Titles and Descriptions
of Industries**

Division A

Agriculture, Forestry, and Fishing

The Division as a Whole

This division includes establishments primarily engaged in agricultural production, forestry, commercial fishing, hunting and trapping, and related services.

The classification of agricultural production covers establishments (farms, ranches, dairies, greenhouses, nurseries, orchards, hatcheries, etc.) primarily engaged in the production of crops, plants, vines, or trees (excluding forestry operations); and the keeping, grazing, or feeding of livestock for the sale of livestock or livestock products (including serums), for livestock increase, or for value increase. Livestock as used here includes cattle, sheep, goats, hogs, and poultry. Also included are animal specialties such as horses, rabbits, bees, pets, fur-bearing animals in captivity and fish in captivity. Agricultural production also includes establishments primarily engaged in the operation of sod farms, mushroom cellars, cranberry bogs, poultry hatcheries, and in the production of bulbs, flower seeds, and vegetable seeds.

Farms are the establishment units generally utilized for the purpose of industrial classification of agricultural production. A farm may consist of a single tract of land, or a number of separate tracts which may be held under different tenures. For example, one tract may be owned by the farmer and another rented by him. It may be operated by the operator alone or with the assistance of members of his household or hired employees, or it may be operated by a partnership, corporation, or other type of organization. When a landowner has one or more tenants, renters, croppers, or managers, the land operated by each is considered a farm.

The classification of agricultural services includes establishments primarily engaged in supplying soil preparation services, crop services, landscape and horticultural services, veterinary and other animal services, and farm labor and management services.

The classification of forestry covers establishments primarily engaged in the operation of timber tracts, tree farms, forest nurseries, the gathering of forest products, or in performing forestry services. Logging camps and logging contractors are classified in Industry 2411.

The classification of fishing, hunting, and trapping covers establishments primarily engaged in commercial fishing (including shellfish and marine products); operating fish hatcheries, and fish and game preserves; and commercial hunting and trapping.

Major Group 01.—AGRICULTURAL PRODUCTION—CROPS*The Major Group as a Whole*

This major group includes establishments (farms, orchards, greenhouses, nurseries, etc.) primarily engaged in the production of crops or plants, vines and trees (excluding forestry operations). This major group also includes establishments primarily engaged in the operation of sod farms, mushroom cellars, cranberry bogs, and in the production of bulbs, flower seeds, and vegetable seeds.

An establishment primarily engaged in crop production (Major Group 01) is classified in the industry (4-digit) and industry group (3-digit) which accounts for 50 percent or more of the total value of sales for its agricultural production. If the total value of sales for agricultural products of an establishment is less than 50 percent from a single 4-digit industry, but 50 percent or more of the value of sales for its agricultural products derives from the products of two or more 4-digit industries within the same 3-digit industry group, the establishment is classified in the miscellaneous industry of that industry group; otherwise, it is classified as a general crop farm in Industry 0191.

Group Industry
No. No.

011 CASH GRAINS**0111 Wheat**

Establishments primarily engaged in the production of wheat.

Wheat farms

0112 Rice

Establishments primarily engaged in the production of rice.

Rice farms

0115 Corn

Establishments primarily engaged in the production of corn for grain. Establishments primarily engaged in the production of sweet corn are classified in Industry 0161.

Corn farms (field corn)

0116 Soybeans

Establishments primarily engaged in the production of soybeans.

Soybean farms

0119 Cash Grains, Not Elsewhere Classified

Establishments primarily engaged in the production of cash grains, not elsewhere classified. This industry also includes establishments deriving 50 percent or more of their total value of sales of agricultural products from cash grains (Industry Group 011), but less than 50 percent from products of any single industry.

Barley farms
Bean (dry field and seed) farms
Buckwheat farms
Cash grain farms: except wheat, rice,
corn, and soybeans
Cowpea farms
Emmer farms
Feed grain farms
Flaxseed farms
Grain farms: except wheat, rice, corn,
and soybeans

Lentil farms
Mustard seed farms
Oat farms
Pea (dry field and seed) farms
Popcorn farms
Rye farms
Safflower farms
Sorghum (except for sirup) farms

013 FIELD CROPS, EXCEPT CASH GRAINS**0131 Cotton**

Establishments primarily engaged in the production of cotton and cottonseed.

Cotton farms

Cottonseed farms

AGRICULTURE, FORESTRY, AND FISHING

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Group Industry
No. No.**013 FIELD CROPS, EXCEPT CASH GRAINS—Continued****0132 Tobacco**

Establishments primarily engaged in the production of tobacco.

Tobacco farms

0133 Sugar Crops

Establishments primarily engaged in the production of sugarcane and sugar beets.

Beet (sugar) farms
Cane (sugar) farmsSugar beet farms
Sugarcane farms**0134 Irish Potatoes**

Establishments primarily engaged in the production of Irish potatoes.

Potato (Irish) farms

0139 Field Crops, Except Cash Grains, Not Elsewhere Classified

Establishments primarily engaged in the production of field crops, except cash grains, not elsewhere classified. This industry also includes establishments deriving 50 percent or more of their total value of sales of agricultural products from field crops except cash grains (Industry Group 013), but less than 50 percent from products of any single industry.

Alfalfa farms
Broomcorn farms
Clover farms
Field crop farms; except cotton, tobacco, potato, sugar, and cash grain
Flax farms, except for flaxseedHay farms
Hop farms
Mint farms
Peanut farms
Sweet potato farms
Timothy farms**016 VEGETABLES AND MELONS****0161 Vegetables and Melons**

Establishments primarily engaged in the production of vegetables and melons in the open. Establishments primarily engaged in growing vegetables under glass or other protection are classified in Industry 0182; dry field and seed beans and peas in Industry 0119; Irish potatoes in Industry 0134; and sweet potatoes in Industry 0139.

Asparagus farms
Beet farms, except sugar beet
Cabbage farms
Cantaloupe and other melon farms
Celery farms
Cucumber farms
English pea farms
Green lima bean farms
Green pea farms
Lettuce and romaine farms
Market gardensMelon farms
Onion farms
Snap bean farms (bush and pole)
Squash farms
Sweet corn farms
Sweet pepper farms
Tomato farms
Truck farms
Vegetable farms
Watermelon farms**017 FRUITS AND TREE NUTS****0171 Berry Crops**

Establishments primarily engaged in the production of caneberries, bushberries, and strawberries.

Berry farms
Blackberry farms
Blueberry farms
Cranberry bogs
Currant farmsDewberry farms
Loganberry farms
Raspberry farms
Strawberry farms**0172 Grapes**

Establishments primarily engaged in the production of grapes.

Grape farms

Vineyards

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

017 FRUITS AND TREE NUTS—Continued

0173 Tree Nuts

Establishments primarily engaged in the production of tree nuts.

Almond groves and farms
Chestnut groves and farms
Pecan groves and farmsTree nut groves and farms
Tung nut groves and farms
Walnut groves and farms

0174 Citrus Fruits

Establishments primarily engaged in the production of citrus fruits.

Citrus groves and farms
Grapefruit groves and farms
Lemon groves and farmsLime groves and farms
Orange groves and farms
Tangerine groves and farms

0175 Deciduous Tree Fruits

Establishments primarily engaged in the production of deciduous tree fruits. Establishments primarily growing citrus fruits are classified in Industry 0174, and tropical fruits in Industry 0179.

Apple orchards and farms
Apricot orchards and farms
Cherry orchards and farms
Nectarine orchards and farms
Peach orchards and farms
Pear orchards and farmsPersimmon orchards and farms
Plum orchards and farms
Pomegranate orchards and farms
Prune orchards and farms
Quince orchards and farms

0179 Fruits and Tree Nuts, Not Elsewhere Classified

Establishments primarily engaged in the production of fruits and nuts, not elsewhere classified. This industry also includes establishments deriving 50 percent or more of their total value of sales of agricultural products from fruit and tree nuts (Industry Group 017), but less than 50 percent from products of any single industry.

Avocado orchards and farms
Date orchards and farms
Fig orchards and farmsOlive groves and farms
Pineapple farms
Tropical fruit farms

018

HORTICULTURAL SPECIALTIES

0181 Ornamental Floriculture and Nursery Products

Establishments primarily engaged in the production of ornamental plants and other nursery products, such as bulbs, florists' greens, flowers, shrubbery, flower and vegetable seeds and plants, and sod. These products may be grown under cover (greenhouse, frame, cloth house, lath house) or outdoors.

Bulbs, growing of
Field nurseries: growing of flowers and shrubbery, except forest shrubbery
Florists' greens, cultivated: growing of
Flowers, growing of
Fruit stocks, growing of
Greenhouses for floral products
Mats, preseeded: soil erosion—growing ofNursery stock, growing of
Plants, ornamental: growing of
Plants, potted: growing of
Rose growers
Seed, flower and vegetable: growing of
Shrubberies, except forest shrubbery: growing of
Sod farms

0182 Food Crops Grown Under Cover

Establishments primarily engaged in the production of fruits and vegetables grown under cover.

Fruits grown under cover
Greenhouses for food crops
Mushroom cellars
Mushroom spawn, production ofRhubarb grown under cover
Tomatoes grown under cover
Vegetables grown under cover

0189 Horticultural Specialties, Not Elsewhere Classified

Establishments primarily engaged in the production of horticultural specialties, not elsewhere classified. This industry also includes establishments deriving 50 percent or more of their total value of sales of agricultural products from horticultural specialties (Industry Group 018), but less than 50 percent from products of any single industry.

AGRICULTURE, FORESTRY, AND FISHING

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Group No.	Industry No.
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019	GENERAL FARMS, PRIMARILY CROP
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0191	General Farms, Primarily Crop
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Establishments deriving 50 percent or more of their total value of sales of agricultural products from crops, including horticultural specialties, but less than 50 percent from products of any single 3-digit industry group.

Crop farms, general

Major Group 02.—AGRICULTURAL PRODUCTION— LIVESTOCK

The Major Group as a Whole

This major group includes establishments (farms, ranches, dairies, feedlots, egg production facilities, broiler facilities, poultry hatcheries, apiaries, etc.) primarily engaged in the keeping, grazing, or feeding of livestock for the sale of livestock or livestock products (including serums), for livestock increase, or for value increase. Livestock, as used here, includes cattle, hogs, sheep, goats, and poultry of all kinds; also included are animal specialties, such as horses, rabbits, bees, pets, fish in captivity, and fur-bearing animals in captivity.

An establishment primarily engaged in the production of livestock or livestock products (Major Group 02) is classified in the industry (4-digit) or industry group (3-digit) which accounts for 50 percent or more of the total value of sales for its agricultural production. If the total value of sales for agricultural products of an establishment is less than 50 percent from a single 4-digit industry, but 50 percent or more of the value of sales for its agricultural products derives from the products of two or more 4-digit industries within the same 3-digit industry group, the establishment is classified in the miscellaneous industry of that industry group; otherwise, it is classified as a general livestock farm in Industry 0291.

Group Industry
No. No.

021 LIVESTOCK, EXCEPT DAIRY, POULTRY, AND ANIMAL SPECIALTIES

0211 Beef Cattle Feedlots

Establishments primarily engaged in the fattening of beef cattle in a confined area for a period of at least 30 days, on their own account or on a fee or contract basis. Feedlot operations that are an integral part of the breeding, raising, or grazing of beef cattle are classified in Industry 0212. Establishments which feed beef cattle for periods of less than 30 days, generally in connection with their transport, are classified in Industry 4789.

Beef cattle feedlots
Cattle feeding farms
Cattle feedlot operation

Feedlots, cattle
Stockyards, exclusively for fattening
cattle

0212 Beef Cattle, Except Feedlots

Establishments primarily engaged in the production or feeding of beef cattle, except feedlots. Establishments primarily raising dairy cattle are classified in Industry 0241.

Beef cattle farms, except feedlots
Cattle raising farms

Cattle ranches

0213 Hogs

Establishments primarily engaged in the production or feeding of hogs on their own account or on a fee or contract basis.

Feedlots, hog

Hog farms

0214 Sheep and Goats

Establishments primarily engaged in the production of sheep, lambs, goats, goat's milk, wool and mohair, including the operation of lamb feedlots on their own account or on a fee or contract basis.

Feedlots, lamb
Goat farms
Goat's milk production
Mohair production

Sheep feeding farms and ranches
Sheep raising farms and ranches
Wool production

AGRICULTURE, FORESTRY, AND FISHING

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Group Industry
No. No.**021 LIVESTOCK, EXCEPT DAIRY, POULTRY, AND ANIMAL SPECIALTIES—Con.****0219 General Livestock, Except Dairy, Poultry, and Animal Specialties**

Establishments deriving 50 percent or more of their total value of sales of agricultural products from livestock and livestock products classified in Industry Group 021, but less than 50 percent from products of any single industry.

024 DAIRY FARMS**0241 Dairy Farms**

Establishments primarily engaged in the production of cows' milk and other dairy products and in raising dairy heifer replacements. Such farms may process and bottle milk on the farm and sell at wholesale or retail. However, the processing and/or distribution of milk from a separate establishment not on the farm is classified in manufacturing or trade. Establishments primarily producing goat's milk are classified in Industry 0214.

Dairy farms
Dairy heifer replacement farms

Milk production

025 POULTRY AND EGGS**0251 Broiler, Fryer, and Roaster Chickens**

Establishments primarily engaged in the production of chickens for slaughter, including those grown under contract.

Broiler chickens, raising of
Chicken farms or ranches (raising for
slaughter)

Cornish hen farms
Frying chickens, raising of
Roasting chickens, raising of

0252 Chicken Eggs

Establishments primarily engaged in the production of chicken eggs, including table eggs and hatching eggs and in the sale of cull hens.

Chicken egg farms
Egg (chicken) farms and ranches

Started pullet farms

0253 Turkeys and Turkey Eggs

Establishments primarily engaged in the production of turkeys and turkey eggs.

Turkey egg farms and ranches

Turkey farms and ranches

0254 Poultry Hatcheries

Establishments primarily engaged in operating poultry hatcheries on their own account or on a fee or contract basis.

Chicken hatcheries
Egg hatcheries (poultry)

Poultry hatcheries

0259 Poultry and Eggs, Not Elsewhere Classified

Establishments primarily engaged in the production of poultry and eggs, not elsewhere classified. This industry also includes establishments deriving 50 percent or more of their total value of sales of agricultural products from poultry and eggs (Industry Group 025), but less than 50 percent from products of any single industry.

Duck farms
Geese farms
Pheasant farms

Pigeon farms
Quail farms

027 ANIMAL SPECIALTIES**0271 Fur-Bearing Animals and Rabbits**

Establishments primarily engaged in the production of fur and fur-bearing animals and rabbits.

Chinchilla farms
Fox farms
Fur farms

Game farms (fur-bearing animals)
Mink farms
Rabbit farms

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

027 ANIMAL SPECIALTIES—Continued

0272 Horses and Other Equines

Establishments primarily engaged in the production of horses and other equines.

Burro farms
Donkey farms
Horse farmsMule farms
Pony farms

0279 Animal Specialties, Not Elsewhere Classified

Establishments primarily engaged in the production of animal specialties, not elsewhere classified, such as pets, bees, fish in captivity except fish hatcheries, worms, and laboratory animals. This industry also includes establishments deriving 50 percent or more of their total value of sales of agricultural products from animal specialties (Industry Group 027) but less than 50 percent from products of any single industry. Establishments primarily engaged in hatching fish are classified in Industry 0021.

Alligator farms
Animal specialty farms
Apiaries
Aviaries (parakeet, canary, love birds,
etc.)
Bee farms
Cat farms
Catfish farms
Dog farms
Earthworm hatcheries
Fish farms
Frog farms

Goldfish farms
Honey production
Kennels, breeding and raising own
stock
Laboratory animal farms (rats, mice,
guinea pigs, etc.)
Minnow farms
Rattlesnake farms
Silk (raw) production and silkworm
farms
Trout farms
Worm farms

029 GENERAL FARMS, PRIMARILY LIVESTOCK

0291 General Farms, Primarily Livestock

Establishments deriving 50 percent or more of their total value of sales of agricultural products from livestock and livestock products, including animal specialties, but less than 50 percent from products of any single 3-digit industry group.

Livestock farms, general

AGRICULTURE, FORESTRY, AND FISHING

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Major Group 07.—AGRICULTURAL SERVICES*The Major Group as a Whole*

This major group includes establishments primarily engaged in performing soil preparation services, crop services, veterinary services, other animal services, farm labor and management services, and landscape and horticultural services, for others on a fee or contract basis. However, feedlots and poultry hatcheries operated on a fee or contract basis are included in Major Group 02.

Group Industry
No. No.

071 SOIL PREPARATION SERVICES**0711 Soil Preparation Services**

Establishments primarily engaged in land breaking, plowing, application of fertilizer, seed bed preparation, and other operations for improving the soil.

Chemical treatment of soil
Fertilizer application
Lime spreading

Plowing
Seed bed preparation
Weed control, before planting

072**CROP SERVICES****0721 Crop Planting, Cultivating, and Protection**

Establishments primarily engaged in performing a variety of crop planting, cultivating, and protection operations. Establishments primarily engaged in complete citrus grove maintenance are classified in Industry 0762, and those providing a combination of services from soil preparation through harvest are classified in Industry 0729.

Aerial dusting and spraying
Bracing of orchard trees and vines
Citrus grove cultivation
Cultivation, mechanical and flame
Cultivation of sprouts, twigs, etc.
Detasseling of corn
Disease control for crops, with/without fertilizing
Dusting crops, with/without fertilizing
Entomological service
Hoing
Insect control for crops, with/without fertilizing

Planting, with/without fertilizing
Pollinating
Pruning of orchard trees and vines
Seeding crops, with/without fertilizing
Seeding of sprouts, twigs, etc.
Spraying crops, with/without fertilizing
Surgery on orchard trees and vines
Thinning of crops, mechanical and chemical
Weed control, after planting

0722 Crop Harvesting, Primarily by Machine

Establishments primarily engaged in mechanical harvesting, picking, and combining of crops, and related activities, using machinery provided by the service firm. Farm labor contractors providing personnel for manual harvesting are classified in Industry 0761.

Berries, machine harvesting of
Chopping and silo filling
Combining
Cotton, machine harvesting of
Fruits and vegetables, machine harvesting of
Grain, machine harvesting of

Hay mowing, raking, baling, and chopping
Peanuts, machine harvesting of
Sugarcane, machine harvesting of
Threshing service
Tree nuts, machine harvesting of

0723 Crop Preparation Services for Market, Except Cotton Ginning

Establishments primarily engaged in performing a variety of operations on crops subsequent to their harvest, with the intent of preparing them for market or further manufacture. Establishments primarily engaged in stemming and redrying of tobacco are classified in Industry 2141.

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**073 CROP SERVICES—Continued****0733 Crop Preparation Services for Market, Except Cotton Ginning—Continued**

Alfalfa cubing
 Bean cleaning
 Corn shelling
 Cotton seed delinting
 Drying of corn, rice, hay, fruits, and
 vegetables
 Flax decorticating and retting
 Fruit precooling, not in connection
 with transportation
 Grain cleaning
 Grain grinding, custom
 Grist mills, custom
 Hay baling
 Hay cubing

Milling of flour, feed, and grain: cus-
 tom
 Moss ginning
 Packaging fresh or farm-dried fruits
 and vegetables
 Potato curing
 Sorting, grading, and packing of fruits
 and vegetables
 Sweet potato curing
 Tobacco grading
 Tree nut hulling and shelling
 Vegetable precooling, not in connection
 with transportation

0734 Cotton Ginning

Establishments primarily engaged in ginning cotton.

Cotton ginning

Cotton pickery

0739 General Crop Services

Establishments primarily engaged in providing a combination of services from soil preparation through harvest, except farm labor and management services which are classified in Group 076.

Crop services, general

074**VETERINARY SERVICES****0741 Veterinary Services for Livestock, Except Animal Specialties**

Establishments of licensed practitioners primarily engaged in the practice of veterinary medicine, dentistry, or surgery, for cattle, hogs, sheep, goats, and poultry. Establishments of licensed practitioners primarily engaged in treating all other animals are classified in Industry 0742.

Animal hospitals for livestock, except
 animal specialties
 Veterinarians for livestock, except ani-
 mal specialties

Veterinary services for livestock, ex-
 cept animal specialties

0742 Veterinary Services for Animal Specialties

Establishments of licensed practitioners primarily engaged in the practice of veterinary medicine, dentistry, or surgery, for animal specialties. Animal specialties include horses, bees, fish, fur-bearing animals, rabbits, dogs, cats, and other pets and birds except poultry. Establishments of licensed practitioners primarily engaged in veterinary medicine for cattle, hogs, sheep, goats, and poultry are classified in Industry 0741.

Animal hospitals for pets and other
 animal specialties
 Veterinarians for pets and other ani-
 mal specialties

Veterinary services for pets and other
 animal specialties

075**ANIMAL SERVICES, EXCEPT VETERINARY****0751 Livestock Services, Except Services for Animal Specialties**

Establishments primarily engaged in performing services, except veterinary, for cattle, hogs, sheep, goats, and poultry. Dairy herd improvement associations are also included in this industry. Establishments primarily engaged in the fattening of cattle are classified in Industry 0211. Establishments engaged in incidental feeding of livestock as a part of holding them in stockyards for periods of less than 30 days (generally in the course of transportation) are classified in Industry 4789. Establishments primarily engaged in performing services, except veterinary for animals, except cattle, hogs, sheep, goats, and poultry are classified in Industry 0752.

AGRICULTURE, FORESTRY, AND FISHING

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Group Industry
No. No.

075 ANIMAL SERVICES, EXCEPT VETERINARY—Continued

0751 Livestock Services, Except Services for Animal Specialties—Continued

Artificial insemination
Breeding of livestock, except animal specialties
Catching poultry, with no hauling
Cattle spraying
Cleaning poultry coops
Dairy herd improvement associations
Livestock breeding services, except for animal specialties

Milk testing, for butterfat, etc.
Pedigree record services, for cattle, hogs, sheep, goats, and poultry
Sheep dipping and shearing
Showing of cattle, hogs, sheep, goats, and poultry
Slaughtering, custom: for individuals
Vaccinating livestock except animal specialties, except by veterinarians

0752 Animal Specialty Services

Establishments primarily engaged in performing services, except veterinary, for pets, equines, and other animal specialties. Establishments primarily engaged in performing services other than veterinary for cattle, hogs, sheep, goats, and poultry are classified in Industry 0751.

Boarding kennels
Boarding or training horses (including race horses)
Breeding of animals other than cattle, hogs, sheep, goats, and poultry
Dog grooming
Honey straining (on the farm)

Pedigree record services for pets and other animal specialties
Showing of pets and other animal specialties
Training of pets and other animal specialties
Vaccinating pets and other animal specialties, except by veterinarians

076 FARM LABOR AND MANAGEMENT SERVICES

0761 Farm Labor Contractors and Crew Leaders

Establishments primarily engaged in supplying labor for agricultural production or harvesting. Establishments primarily engaged in machine harvesting are classified in Industry 0722.

Crew leaders, farm labor: contract

Farm labor contractors

0762 Farm Management Services

Establishments primarily engaged in providing farm management services, including management or complete maintenance of citrus groves, orchards, and vineyards. Such activities may include cultivating, harvesting, or other specialized activities, but establishments primarily engaged in performing such operations without management services are classified in the appropriate specific industry within Group 072.

Citrus grove management and maintenance, with or without crop services
Farm management services

Orchard management and maintenance, with or without crop services
Vineyard management and maintenance, with or without crop services

078 LANDSCAPE AND HORTICULTURAL SERVICES

0781 Landscape Counseling and Planning

Establishments primarily engaged in performing landscape planning, architectural, and counseling services.

Garden planning
Horticultural advisory or counseling services

Landscape architects
Landscape counseling
Landscape planning

0782 Lawn and Garden Services

Establishments primarily engaged in performing a variety of lawn and garden services.

Bermuda sprigging services
Cemetery upkeep, independent
Garden maintenance
Garden planting
Lawn care
Lawn fertilizing services

Lawn mowing services
Lawn spraying services
Lawn sprigging services
Mowing highway center strips and edges

STANDARD INDUSTRIAL CLASSIFICATION

078

LANDSCAPE AND HORTICULTURAL SERVICES—Continued**0783 Ornamental Shrub and Tree Services**

Establishments primarily engaged in performing a variety of ornamental shrub and tree services. Establishments primarily engaged in forestry services are classified in Major Group 08.

Arborist services
Ornamental bush planting, pruning,
bracing, spraying, and surgery

**Ornamental tree planting, pruning,
bracing, spraying, and surgery
Tree trimming for public utility lines
Utility line tree trimming services**

AGRICULTURE, FORESTRY, AND FISHING

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Major Group 08.—FORESTRY*The Major Group as a Whole*

This major group includes establishments primarily engaged in the operation of timber tracts, tree farms, forest nurseries, and related activities such as reforestation services and the gathering of gums, barks, balsam needles, maple sap, Spanish moss, and other forest products.

Group Industry
No. No.

081 TIMBER TRACTS**0811 Timber Tracts**

Establishments primarily engaged in the operation of timber tracts or tree farms for the purpose of selling standing timber. Establishments holding timber tracts as real property (not for sale of timber) are classified in Industry 6519; and logging camps and logging contractors in Industry 2411.

Timber tracts

Tree farms

082 FOREST NURSERIES AND TREE SEED GATHERING AND EXTRACTING**0821 Forest Nurseries and Tree Seed Gathering and Extracting**

Establishments primarily engaged in growing trees for purposes of reforestation and gathering, extracting, and selling tree seeds.

Forest nurseries

Tree seed gathering, extracting, and selling

084 GATHERING OF MISCELLANEOUS FOREST PRODUCTS, EXCEPT TREE SEEDS**0843 Extraction of Pine Gum**

Establishments primarily engaged in the extraction of pine gum. The concentration or distillation of pine gum, when carried on in the forest, is included in this industry.

Distillation of turpentine and rosin, if carried on at the gum farm

Pine gum, extraction of

0849 Gathering of Forest Products, Not Elsewhere Classified

Establishments primarily engaged in gathering forest products, not elsewhere classified. The concentration or distillation of these products, when carried on in the forest, is included; the extraction of pine gum is classified in Industry 0843.

Balsam needles, gathering of
Distillation of gums (except pine gum), if carried on at the gum farm
Gathering of gums (except pine gum) and barks
Ginseng, gathering of
Huckleberry greens, gathering of

Lac production
Maple sap, gathering of
Rubber plantations
Spanish moss, gathering of
Sphagnum moss, gathering of
Teaberries, gathering of

085 FORESTRY SERVICES**0851 Forestry Services**

Establishments primarily engaged in performing, on a contract or fee basis, services related to timber production, wood technology, forestry economics and marketing, and other forestry services, not elsewhere classified, such as cruising timber, firefighting, and reforestation.

Cruising timber
Estimating timber
Firefighting (forest)
Fire prevention, forestry
Forest management plans, preparation of

Forestry services
Pest control, forest
Reforestation
Timber valuation

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STANDARD INDUSTRIAL CLASSIFICATION

Major Group 09.—FISHING, HUNTING, AND TRAPPING*The Major Group as a Whole*

This major group includes establishments primarily engaged in commercial fishing (including crabbing, lobstering, clamming, oystering, and the gathering of sponges, seaweed, etc.), and the operation of fish hatcheries, fish and game preserves, in commercial hunting and trapping, and in game propagation.

Group Industry
No. No.

091 COMMERCIAL FISHING**0912 Finfish**

Establishments primarily engaged in the catching (or taking) of finfish.

Finfish, catching of
Fisheries, finfish
Cod, catching of
Haddock, catching of
Mackerel, catching of

Menhaden, catching of
Pilchard, catching of
Salmon, catching of
Sea herring, catching of
Tuna, catching of

0913 Shellfish

Establishments primarily engaged in the catching (or taking) of shellfish.

Clams, digging of
Crabs, catching of
Fisheries, shellfish
Lobsters, catching of

Oyster beds
Oysters, dredging or tonging of
Shellfish, catching of
Shrimp, catching of

0919 Miscellaneous Marine Products

Establishments primarily engaged in miscellaneous fishing activities, such as catching (or taking) of sea urchins, terrapins, turtles, whales, and frogs. The gathering of seaweed and sponges is also included in this industry.

Cultured pearl production
Dredging oyster shells
Sea urchins, catching of
Seaweed, gathering of
Sponges, gathering of

Terrapins, catching of
Turtles, catching of
Whale fishing
Whale meat production
Whale oil production, crude

092 FISH HATCHERIES AND PRESERVES**0921 Fish Hatcheries and Preserves**

Establishments primarily engaged in operating fish hatcheries or preserves. Establishments primarily engaged in the production of fish or frogs under controlled feeding, sanitation, and harvesting procedures are classified in Industry 0279.

Fish hatcheries

Fishing preserves

097 HUNTING AND TRAPPING, AND GAME PROPAGATION**0971 Hunting and Trapping, and Game Propagation**

Establishments primarily engaged in commercial hunting and trapping, or in the operation of game preserves.

Animal trapping, commercial
Game management
Game preserves
Game propagation
Game retreats, operation of

Hunting carried on as a business enterprise
Hunting preserves, operation of
Trapping carried on as a business enterprise
Wild life management

Division B

Mining

The Division as a Whole

This division includes all establishments primarily engaged in mining. Mining is here used in the broad sense to include the extraction of minerals occurring naturally: solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" is also used in the broad sense to include quarrying, well operation, milling (crushing, screening, washing, flotation, etc.), and other preparation customarily done at the mine site, or as a part of mining activity.

Exploration and development of mineral properties are included. Services performed on a contract, fee, or similar basis in the development or operation of mineral properties are classified separately but within this division. Establishments which have complete responsibility for operating mines, quarries, or oil and gas wells for others on a contract, fee, or similar basis are classified according to the product mined rather than as mineral services.

Mining operations are classified, by industry, on the basis of the principal mineral produced, or, if there is no production, on the basis of the principal mineral for which exploration or development work is in process. The mining of culm banks, ore dumps, and tailing piles is classified as mining according to the principal mineral product derived.

The purification and distribution of water is classified in Industry 4941 and the bottling and distribution of natural spring and mineral waters is classified in Industry 5149.

Crushing, grinding, or otherwise preparing clay, ceramic, and refractory minerals; barite; and miscellaneous nonmetallic minerals, except fuels, not in conjunction with mining or quarrying operations, are classified in Industry 3295. Dressing of stone or slabs is classified in Industry 3281, whether or not mining is done at the same establishment.

Major Group 10.—METAL MINING*The Major Group as a Whole*

This major group includes establishments primarily engaged in mining, developing mines, or exploring for metallic minerals (ores). These ores are valued chiefly for the metals contained, to be recovered for use as such or as constituents of alloys, chemicals, pigments, etc. This major group also includes all ore dressing and beneficiating operations, whether performed at mills operated in conjunction with the mines served or at mills, such as custom mills, operated separately. These include mills which crush, grind, wash, dry, sinter, or leach ore, or perform gravity separation or flotation operations. Magnesite and brucite operations are classified in Industry 1459, and crushed dolomite operations in Industry 1422. Smelters and refineries are classified in Major Group 33, Primary Metal Industries, and establishments engaged in producing primary magnesium metal in Industry 3339. The operation of brine wells or sea water plants for the production of magnesium is classified in Major Group 28.

Exploration under preliminary phases of operation should be classified according to the type of ore expected to be found, when performed by operators of the properties. Exploration performed on a contract, fee, or similar basis is classified in Industry 1081.

Group Industry
No. No.

101 IRON ORES**1011 Iron Ores**

Establishments primarily engaged in mining, beneficiating, or otherwise preparing iron ores and manganese ores valued chiefly for their iron content. This industry includes production of sinter and other agglomerates except those associated with blast furnace operations. Blast furnaces primarily engaged in producing pig iron from iron ore are classified in Industry 3312.

Brown ore mining
Hematite mining
Iron agglomerate and pellet production
Iron ore, blocked
Iron ore dressing (beneficiation) plants
Iron ore mining
Limonite mining

Magnetite mining
Manganese ore mining, valued chiefly
for iron content
Siderite mining
Sintering of iron ore at the mine
Taconite mining

102 COPPER ORES**1021 Copper Ores**

Establishments primarily engaged in mining, milling, or otherwise preparing copper ores. This industry also includes establishments primarily engaged in the recovery of copper concentrates by precipitation and leaching of copper ore. Establishments primarily engaged in the recovery of refined copper by leaching copper concentrates are classified in Major Group 33.

Chalcocite mining
Chalcopyrite mining

Copper ore mining
Cuprite mining

103 LEAD AND ZINC ORES**1031 Lead and Zinc Ores**

Establishments primarily engaged in mining, milling, or otherwise preparing lead ores, zinc ores, or lead-zinc ores.

Blende (zinc) mining
Calamine mining
Cerrusite mining
Galena mining
Lead ore mining
Lead-zinc ore mining

Smithsonite mining
Sphalerite mining
Willemite mining
Zinc-blende (sphalerite) mining
Zincite mining
Zinc ore mining

MINING

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Group
No. Industry
No.**104 GOLD AND SILVER ORES****1041 Gold Ores**

Establishments primarily engaged in mining gold ores from lode deposits or in the recovery of gold from placer deposits by any method. In addition to ore dressing methods such as crushing, grinding, gravity concentration, and froth flotation, this industry includes amalgamation, cyanidation, and the production of bullion at the mine, mill or dredge site.

Bullion, gold : produced at mine, mill or
dredge site
Calaverite mining
Lode gold mining

Placer gold mining
Sylvanite mining
Telluride (gold) mining

1044 Silver Ores

Establishments primarily engaged in mining, milling, or otherwise preparing silver ores. The production of bullion at the mine or mill site is included.

Bullion, silver : produced at mine or mill
site

Silver ore mining

105 BAUXITE AND OTHER ALUMINUM ORES**1051 Bauxite and Other Aluminum Ores**

Establishments primarily engaged in mining, milling, or otherwise preparing bauxite and other aluminum ores. Associated activities such as drying, calcining, activating, and sintering are also included.

Aluminum ore mining

Bauxite mining

106 FERROALLOY ORES, EXCEPT VANADIUM**1061 Ferroalloy Ores, Except Vanadium**

Establishments primarily engaged in mining, milling, or otherwise preparing ferroalloy ores, except vanadium. The mining of manganiferous ores valued chiefly for their iron content is classified in Industry 1011. Titanium ore, used sometimes for ferroalloying but principally for other purposes, is classified in Industry 1099. Mining of vanadium is classified in Industry 1094.

Chromite mining
Chromium ore mining
Cobalt ore mining
Columbite mining
Ferberite mining
Huebnerite mining
Manganese ore mining
Manganite mining
Molybdenite mining
Molybdenum ore mining
Molybdate mining

Nickel ore mining
Pallomelane mining
Pyrolusite mining
Rhodochrosite mining
Scheelite mining
Tantalite mining
Tantalum ore mining
Tungsten ore mining
Wolframite mining
Wulfenite mining

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

100 METAL MINING SERVICES

1001 Metal Mining Services

Establishments primarily engaged in performing metal mining services for others on a contract, fee, or similar basis, such as the removal of overburden, strip mining for metallic ores, prospect and test drilling, and mine exploration and development. Establishments which have complete responsibility for operating mines for others on a contract, fee, or similar basis are classified according to the product mined rather than as metal mining services. Establishments primarily performing hauling services are classified in Division E.

Boring test holes for metal mining: on a contract basis
Draining or pumping of metal mines: on a contract basis
Drilling for metal mining: on a contract basis
Exploration, metal mining: on a contract basis
Mine development, metal: on a contract basis

Overburden removal for metal mining: on a contract basis
Prospect drilling for metal mining: on a contract basis
Sinking shafts for metal mining: on a contract basis
Strip mining, metal: on a contract basis
Test drilling for metal mining: on a contract basis

109 MISCELLANEOUS METAL ORES

1092 Mercury Ores

Establishments primarily engaged in mining, milling, or otherwise preparing mercury ores. This industry includes the production of metallic mercury by furnacing or retorting at the mine site.

Cinnabar mining
Mercury ore mining

Quicksilver (mercury) ore mining

1094 Uranium-Radium-Vanadium Ores

Establishments primarily engaged in mining, milling, or otherwise preparing uranium-radium-vanadium ores.

Carnotite mining
Pitchblende mining
Radium ore mining
Roscoelite (vanadium hydromica) mining

Uraninite (pitchblende) mining
Uranium ore mining
Vanadium ore mining

1099 Metal Ores, Not Elsewhere Classified

Establishments primarily engaged in mining, milling, or otherwise preparing miscellaneous metal ores not elsewhere classified.

Antimony ore mining
Bastnaesite ore mining
Beryl mining
Beryllium ore mining
Cerium ore mining
Ilmenite mining
Iridium ore mining
Microlite mining
Monazite mining
Osmium ore mining
Palladium ore mining

Platinum group ore mining
Rare-earth ore mining
Rhodium ore mining
Ruthenium ore mining
Rutile mining
Thorium ore mining
Tin ore mining
Titaniferous-magnetite mining, valued chiefly for titanium content
Titanium ore mining
Zirconium ore mining

MINING

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Major Group 11.—ANTHRACITE MINING*The Major Group as a Whole*

This major group includes establishments primarily engaged in producing anthracite (hard coal). Included are mining operations, dredging operations, and preparation plants (also known as cleaning plants, breakers, and washeries) whether or not such plants are operated in conjunction with the mines served. The production of coal fuel briquettes and packaged fuel is classified in Major Group 29, and the production of manufactured gas from coal in Industry 4925.

Group Industry
No. No.

111 ANTHRACITE MINING**1111 Anthracite**

Establishments primarily engaged in producing anthracite or in developing anthracite mines. All establishments in the United States that are classified in this industry are in Pennsylvania. This industry includes underground mines, stripping or culm bank operations by owners or lessees, dredge operations, and coal preparation plants (breakers, washeries, and screening plants) whether or not operated in conjunction with the mines served.

Anthracite mining
Breakers, anthracite
Coal mining, anthracite
Culm bank recovery, anthracite: except on a contract basis
Dredging, anthracite
Preparation plants, anthracite

Recovery of anthracite from culm banks, except on a contract basis
Screening plants, anthracite
Strip mining, anthracite: except on a contract basis
Washeries, anthracite

1112 Anthracite Mining Services

Establishments primarily engaged in performing anthracite mining services for others, on a contract, fee, or similar basis. Establishments which have complete responsibility for operating mines for others on a contract, fee, or similar basis are classified according to the product mined rather than as anthracite mining services.

Anthracite mining services performed on a contract basis
Culm bank recovery, anthracite: on a contract basis
Draining or pumping of anthracite mines: on a contract basis
Drilling for anthracite mining: on a contract basis

Mine tunneling, anthracite: on a contract basis
Overburden removal for anthracite: on a contract basis
Sinking shafts for anthracite mining: on a contract basis
Strip mining, anthracite: on a contract basis

Major Group 12.—BITUMINOUS COAL AND LIGNITE MINING*The Major Group as a Whole*

This major group includes establishments primarily engaged in producing bituminous coal or lignite. Included are mining operations and preparation plants (also known as cleaning plants and washeries) whether or not such plants are operated in conjunction with the mines served. The production of coal fuel briquettes and packaged fuel is classified in Major Group 29, and the production of manufactured gas from coal in Industry 4925.

Group Industry
No. No.

121 BITUMINOUS COAL AND LIGNITE MINING**1211 Bituminous Coal and Lignite**

Establishments primarily engaged in producing bituminous coal or lignite or in developing bituminous coal or lignite mines. This industry includes underground mining, auger mining, strip mining, culm bank mining, and coal cleaning, crushing, screening, and sizing plants, whether or not operated in conjunction with the mines served.

Brown coal mining
Cleaning plants, bituminous coal
Coal mining, bituminous
Crushing plants, bituminous coal
Culm bank recovery, bituminous coal
or lignite: except on a contract
basis
Hard coal mining, except Pennsylvania
anthracite

Lignite mining
Screening plants, bituminous coal
Semianthracite mining
Semibituminous coal mining
Strip mining, bituminous coal: except
on a contract basis
Subbituminous coal mining
Washerries, bituminous coal

1213 Bituminous Coal and Lignite Mining Services

Establishments primarily engaged in performing bituminous coal and lignite mining services for others on a contract, fee, or similar basis. Establishments which have complete responsibility for operating mines for others on a contract, fee, or similar basis are classified according to the product mined rather than as bituminous coal and lignite mining services.

Auger mining services, bituminous coal
or lignite: on a contract basis
Bituminous coal mining services: on a
contract basis
Culm bank recovery, bituminous coal
or lignite: on a contract basis
Draining or pumping bituminous coal
and lignite mines: on a contract
basis
Drilling for bituminous coal and lignite
mining: on a contract basis
Lignite mining services: on a contract
basis

Lignite strip mining: on a contract
basis
Overburden removal for bituminous
coal: on a contract basis
Sinking shafts for bituminous coal and
lignite mining: on a contract basis
Strip mining, bituminous coal: on a
contract basis
Stripping services, bituminous coal and
lignite: on a contract basis
Tunneling, bituminous coal and lignite
mining: on a contract basis

MINING

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Major Group 13.—OIL AND GAS EXTRACTION*The Major Group as a Whole*

This major group includes establishments primarily engaged in: (1) producing crude petroleum and natural gas, (2) recovering oil from oil sands and oil shale, and (3) producing natural gasoline and cycle condensate. Types of activities included are exploration, drilling, oil and gas well operation and maintenance, the operation of natural gasoline and cycle plants, and the mining and extraction of oil from oil sands and oil shale. This major group also includes such basic activities as emulsion breaking and desilting of crude petroleum in the preparation of oil and gas customarily done at the field site. Pipe line transportation of petroleum, gasoline and other petroleum products (except gathering lines) is classified in Major Group 46—Pipe Line Transportation, and of natural gas in Major Group 49—Electric, Gas, and Sanitary Services. Establishments primarily engaged in petroleum refining and in the production of lubricating oils and greases are classified in Major Group 29.

Group Industry
No. No.

131 CRUDE PETROLEUM AND NATURAL GAS**1311 Crude Petroleum and Natural Gas**

Establishments primarily engaged in operating oil and gas field properties. Such activities include exploration for crude petroleum and natural gas; drilling, completing, and equipping wells; operation of separators, emulsion breakers, desilting equipment; and all other activities in the preparation of oil and gas up to the point of shipment from the producing property. This industry also includes the production of oil through the mining and extraction of oil from oil shale and oil sands. Establishments primarily engaged in performing oil field services for operators on a contract, fee, or similar basis are classified in Group 132.

Crude oil production
Crude petroleum production
Natural gas production

Oil sand mining
Oil shale mining

132 NATURAL GAS LIQUIDS**1321 Natural Gas Liquids**

Establishments primarily engaged in producing liquid hydrocarbons from oil and gas field gases. Establishments recovering liquefied petroleum gases incident to petroleum refining or to the manufacturing of chemicals are classified in Major Groups 28 or 29. Establishments recovering helium from natural gas are classified in Major Group 28.

Butane (natural) production
Casing-head butane and propane production
Cycle condensate production (natural gas)
Ethane (natural) production
Fractionating natural gas liquids

Isobutane (natural) production
Liquefied petroleum gases (natural) production
Natural gas liquids production
Natural gasoline production
Propane (natural) production

133 OIL AND GAS FIELD SERVICES**1331 Drilling Oil and Gas Wells**

Establishments primarily engaged in drilling wells for oil or gas field operations for others on a contract, fee, or similar basis. This industry includes contractors that specialize in "spudding in," "drilling in," redrilling, and directional drilling.

Directional drilling of oil and gas wells: on a contract basis
Redrilling oil and gas wells: on a contract basis
Reworking oil and gas wells: on a contract basis

"Spudding in" oil and gas wells: on a contract basis
Well drilling—gas, oil, service, and water intake on a contract basis

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

138 OIL AND GAS FIELD SERVICES—Continued

1382 Oil and Gas Field Exploration Services

Establishments primarily engaged in performing geophysical, geological, and other exploration services for oil and gas on a contract, fee, or similar basis.

Aerial geophysical exploration, oil and gas: on a contract basis
Exploration, oil and gas field: on a contract basis
Geological exploration, oil and gas field: on a contract basis

Geophysical exploration, oil and gas field: on a contract basis
Seismograph surveys: on a contract basis

1389 Oil and Gas Field Services, Not Elsewhere Classified

Establishments primarily engaged in performing oil and gas field services, not elsewhere classified, for others on a contract, fee, or similar basis, such as excavating slush pits and cellars; grading, and building of foundations at well locations; well surveying; running, cutting, and pulling casings, tubes, and rods; cementing wells; shooting wells; perforating well casing; acidizing and chemically treating wells; and cleaning out, bailing, and swabbing wells.

Establishments which have complete responsibility for operating oil and gas wells for others on a contract, fee, or similar basis are classified according to the product extracted rather than as oil and gas field services. Establishments primarily engaged in hauling oil and gas field supplies and equipment are classified in Division E. Establishments primarily engaged in oil and gas field machine-shop work are classified in Industry 3500.

Acidizing wells: on a contract basis
Bailing wells: on a contract basis
Building oil and gas well foundations on site: on a contract basis
Cementing oil and gas well casings: on a contract basis
Chemically treating wells: on a contract basis
Cleaning lease tanks, oil field: on a contract basis
Cleaning wells: on a contract basis
Derrick building, repairing, and dismantling: oil and gas well—contract
Dismantling of oil well rigs (oil field service): on a contract basis
Erecting lease tanks, oil field: on a contract basis
Excavating slush pits and cellars: on a contract basis
"Fishing" for tools, oil and gas field: on a contract basis
Gas compressing (natural gas) at the fields: on a contract basis
Gas well rig building, repairing, and dismantling: on a contract basis
Grading oil and gas well foundations: on a contract basis
Hydraulic fracturing wells: on a contract basis

Impounding and storing salt water in connection with petroleum production
Lease tanks, oil field: erecting, cleaning, and repairing: contract basis
Logging wells: on a contract basis
Mud service, oil field drilling: on a contract basis
Oil sampling service for oil companies: on a contract basis
Oil well logging: on a contract basis
Perforating well casings: on a contract basis
Pipe testing—oil field service: on a contract basis
Plugging and abandoning wells: on a contract basis
Pumping of oil and gas wells: on a contract basis
Removal of condensate gasoline from field (gathering) lines: contract
Running, cutting, and pulling casings, tubes and rods: oil and gas well
Servicing oil and gas wells: on a contract basis
Shooting wells: on a contract basis
Shot-hole drilling service (oil field): on a contract basis
Surveying wells: on a contract basis
Swabbing wells: on a contract basis

MINING

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Major Group 14.—MINING AND QUARRYING OF NONMETALLIC MINERALS, EXCEPT FUELS

The Major Group as a Whole

This major group includes establishments primarily engaged in mining or quarrying, developing mines, or exploring for nonmetallic minerals, except fuels. Also included are certain well and brine operations, and primary preparation plants, such as those engaged in crushing, grinding, washing, or other concentration.

Establishments primarily engaged in manufacturing cement are classified in Industry 8241 and lime in Industry 8274; in cutting and finishing stone and stone products in Industry 3281; and in manufacturing brick and other structural clay products in Industry Group 325.

Establishments primarily engaged in crushing, pulverizing or otherwise treating earths, rocks, and minerals mined in Groups 145 or 149, or Industry 1472, not in conjunction with mining or quarrying operations, are classified in Industry 3295; establishments primarily engaged in these activities in conjunction with mines or quarries are classified in Mining. Establishments primarily engaged in crushing, pulverizing or otherwise treating other nonmetallic minerals are classified in Mining, whether or not they are operated in conjunction with mines.

Establishments primarily engaged in the other manufacturing of stone, clay, glass and concrete products (Major Group 32) from minerals mined at the same establishment are classified in manufacturing when separate reports are not available for the mining and manufacturing activities.

Group No. Industry No.

141 DIMENSION STONE

1411 Dimension Stone

Establishments primarily engaged in mining or quarrying dimension stone. Also included are establishments primarily engaged in producing rough blocks and slabs. Establishments primarily engaged in mining or quarrying and shaping grindstones, pulpstones, millstones, burrstones, and sharpening stones, are classified in Industry 1490; and dimension soapstone in Industry 1496. Establishments primarily engaged in dressing (shaping, polishing, or otherwise finishing) blocks and slabs are classified in Industry 3281. Nepheline syenite operations are classified in Industry 1459.

Argillite, dimension—quarrying
Basalt, dimension—quarrying
Bluestone, dimension—quarrying
Calcareous tufa, dimension—quarrying
Diabase, dimension—quarrying
Diorite, dimension—quarrying
Dolomite, dimension—quarrying
Dolomitic marble, dimension—quarrying
Flagstone mining
Gabbro, dimension—quarrying
Gneiss, dimension—quarrying
Granite, dimension—quarrying
Greenstone, dimension—quarrying
Limestone, dimension—quarrying

Marble, dimension—quarrying
Mica schist, dimension—quarrying
Onyx marble, dimension—quarrying
Quartzite, dimension—quarrying
Rubble mining
Sandstone, dimension—quarrying
Serpentine, dimension—quarrying
Slate, dimension—quarrying
Syenite (except nepheline), dimension—quarrying
Trap rock, dimension—quarrying
Travertine, dimension—quarrying
Verde antique, dimension—quarrying
Volcanic rock, dimension—quarrying

142 CRUSHED AND BROKEN STONE, INCLUDING RIPRAP

1422 Crushed and Broken Limestone

Establishments primarily engaged in mining or quarrying crushed and broken limestone, including related rocks, such as dolomite, cement rock, marl, travertine, and calcareous tufa. Also included are establishments primarily engaged in the grinding or pulverizing of limestone, but establishments primarily engaged in producing lime are classified in Industry 8274.

Calcareous tufa, crushed and broken—quarrying
Cement rock, crushed and broken—quarrying
Chalk mining, crushed and broken—quarrying
Dolomite, crushed and broken—quarrying

Lime rock, ground
Limestone (except bituminous), crushed and broken—quarrying
Marl, crushed and broken—quarrying
Travertine, crushed and broken—quarrying
Whiting mining, crushed and broken—quarrying

Group No.	Industry No.	
142		CRUSHED AND BROKEN STONE, INCLUDING RIPRAP—Continued
1423		Crushed and Broken Granite
		Establishments primarily engaged in mining or quarrying crushed and broken granite, including related rocks, such as gneiss, syenite, and diorite.
		Diorite, crushed and broken—quarrying
		Gneiss, crushed and broken—quarrying
1429		Crushed and Broken Stone, Not Elsewhere Classified
		Establishments primarily engaged in mining or quarrying crushed and broken stone, not elsewhere classified.
		Basalt, crushed and broken—quarrying
		Boulder, crushed and broken—quarrying
		Diorite, crushed and broken—quarrying
		Dolomitic marble, crushed and broken—quarrying
		Gabbro, crushed and broken—quarrying
		Garnet, crushed and broken—quarrying
		Grits mining (crushed stone)
		Marble, crushed and broken—quarrying
		Mica schist, crushed and broken—quarrying
		Onyx marble, crushed and broken—quarrying
		Quartzite, crushed and broken—quarrying
		Riprap quarrying, other than limestone or granite
		Sandstone (except bituminous), crushed and broken—quarrying
		Serpentine, crushed and broken—quarrying
		Slate, crushed and broken—quarrying
		Trap rock, crushed and broken—quarrying
		Verde antique, crushed and broken—quarrying
		Volcanic rock, crushed and broken—quarrying
144		SAND AND GRAVEL
1442		Construction Sand and Gravel
		Establishments primarily engaged in operating sand and gravel pits and dredges, and in washing, screening, or otherwise preparing sand and gravel for construction uses.
		Common sand mining
		Construction sand mining
1446		Industrial Sand
		Establishments primarily engaged in operating sand pits and dredges, and in washing, screening, and otherwise preparing sand for uses other than construction, such as glassmaking, molding, and abrasives.
		Abrasive sand mining
		Blast sand mining
		Enamel sand mining
		Filtration sand mining
		Foundry sand
		Glass sand mining
		Grinding sand mining
		Industrial sand mining
		Molding sand mining
		Silica mining
		Silica sand mining
145		CLAY, CERAMIC, AND REFRACTORY MINERALS
		Establishments primarily engaged in mining, milling, or otherwise preparing clays and refractory minerals. Mines operated in conjunction with plants manufacturing cement, brick or other structural clay products, or pottery and related products, are included in this industry when separate reports are available. Establishments primarily engaged in grinding, pulverizing, or otherwise treating clay, and ceramic and refractory minerals not in conjunction with mining or quarrying operations are classified in Industry 3295.
1452		Bentonite
		Establishments primarily engaged in mining, milling, or otherwise preparing bentonite.
		Bentonite mining

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Group
No. Industry
No.**145 CLAY, CERAMIC AND REFRACTORY MINERALS—Continued****1453 Fire Clay**

Establishments primarily engaged in mining, milling, or otherwise preparing fire clay, including stoneware clay and diaspore. Establishments producing fire clay as a principal product in conjunction with the manufacture of cement or clay refractory or pottery products are classified in Major Group 32.

Burley mining
Diaspore mining
Fire clay mining

Flint clay mining
Plastic fire clay mining
Stoneware clay mining

1454 Fuller's Earth

Establishments primarily engaged in mining, milling, or otherwise preparing fuller's earth.

Fuller's earth mining

1455 Kaolin and Ball Clay

Establishments primarily engaged in mining, milling, or otherwise preparing kaolin or ball clay, including china clay, paper clay, and slip clay.

Ball clay mining
Bleaching clay mining
China clay mining
Kaolin mining

Paper clay mining
Rubber clay mining
Slip clay mining

1459 Clay, Ceramic, and Refractory Minerals, Not Elsewhere Classified

Establishments primarily engaged in mining, milling, or otherwise preparing clay, ceramic or refractory minerals, not elsewhere classified. Establishments producing common clay and shale in conjunction with the manufacture of structural clay products are classified in Major Group 32.

Andalusite mining
Aplite mining
Brucite mining
Clays (common) quarrying—not in
conjunction with manufacturing
Cornwall stone mining
Cyanite mining
Dumortierite mining
Feldspar mining
Kyanite mining

Magnesite mining
Nepheline syenite quarrying
Olivine (non-gem) mining
Pegmatite (feldspar) mining
Pinite mining
Shale (common) quarrying—not in
conjunction with manufacturing
Sillimanite mining
Syenite, nepheline—quarrying
Topas (nongem) mining

147 CHEMICAL AND FERTILIZER MINERAL MINING**1472 Barite**

Establishments primarily engaged in mining, milling, grinding, or otherwise preparing crude barite. Establishments primarily engaged in milling, grinding, or otherwise preparing barite not in conjunction with mining or quarrying operations are classified in Industry 3295.

Barite mining
Barium ore mining

Barytes mining

1473 Fluorspar

Establishments primarily engaged in mining, milling, or otherwise preparing fluorspar.

Fluorite mining
Fluorspar, ground or otherwise treated

Fluorspar mining

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

147 CHEMICAL AND FERTILIZER MINERAL MINING—Continued

1474 Potash, Soda, and Borate Minerals

Establishments primarily engaged in mining, milling, or otherwise preparing natural potassium, sodium, or boron compounds (other than common salt).

Alum (natural) mining
Borate compounds (natural) mining
Borax, crude: ground and pulverized
Borax mining
Boron mineral mining
Colemanite mining
Glauber's salt mining
Kernite mining
Potash mining

Potassium compounds (natural) mining
Salines (except common salt) mining
Soda ash (natural) mining
Sodium compounds, natural (except common salt) mining
Trona mining
Ulexite mining

1475 Phosphate Rock

Establishments primarily engaged in mining, milling, drying, calcining, sintering, or otherwise preparing phosphate rock, including apatite. Establishments primarily engaged in the production of phosphoric acid, superphosphates, or other manufactured phosphate compounds or chemicals are classified in Major Group 28.

Apatite mining

Phosphate rock mining

1476 Rock Salt

Establishments primarily engaged in mining, crushing, and screening rock salt. Establishments primarily engaged in producing salt by evaporation of sea water or brine are classified in Industry 2899.

Rock salt mining

Salt (common) mining, rock

1477 Sulfur

Establishments primarily engaged in mining native sulfur, including the extraction of native sulfur at well operations, and mining and beneficiating sulfur ore. Establishments primarily engaged in mining, preparing to mine, or concentrating pyrites are classified in Industry 1479.

Brimstone mining

Sulfur (native) mining

1479 Chemical and Fertilizer Mineral Mining, Not Elsewhere Classified

Establishments primarily engaged in mining, milling, or otherwise preparing chemical or fertilizer mineral raw materials, not elsewhere classified.

Alunite mining
Amblygonite mining
Arsenic mineral mining
Celestite mining
Guano mining
Lepidolite mining
Lithium mineral mining
Marcasite mining
Mineral pigment mining

Ocher mining
Pyrites mining
Pyrrhotite mining
Sienna mining
Spodumene mining
Strontianite mining
Strontium mineral mining
Umbre mining

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NONMETALLIC MINERALS (EXCEPT FUELS) SERVICES

1481 Nonmetallic Minerals (Except Fuels) Services

Establishments primarily engaged in the removal of overburden, strip mining, and other services for nonmetallic minerals (except fuels) for others on a contract, fee, or similar basis. Establishments primarily engaged in performing hauling services are classified in Division E.

Boring test holes for nonmetallic minerals except fuels: on contract basis
Draining or pumping of nonmetallic mineral (except fuels) mines: contract
Drilling for nonmetallic minerals except fuels: on a contract basis
Exploration, nonmetallic minerals except fuels: on a contract basis

Mine development, nonmetallic minerals except fuels: on a contract basis
Nonmetallic minerals (except fuels) services: on a contract basis
Overburden removal for nonmetallic minerals except fuels: on contract
Shaft sinking, nonmetallic minerals except fuels: on a contract basis
Strip mining, nonmetallic minerals except fuels: on a contract basis

MINING

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Group
No. Industry
No.

149

MISCELLANEOUS NONMETALLIC MINERALS, EXCEPT FUELS

Establishments primarily engaged in mining, quarrying, milling, or otherwise preparing miscellaneous nonmetallic minerals, except fuels. Establishments primarily engaged in grinding, pulverizing, or otherwise treating miscellaneous nonmetallic minerals not in conjunction with mining or quarrying operations are classified in Industry 3296.

1492 Gypsum

Establishments primarily engaged in mining, quarrying, milling, or otherwise preparing gypsum. Calcining of gypsum is classified in Industry 3275.

Alabaster mining
Gypsite mining

Gypsum mining
Selenite mining

1496 Talc, Soapstone, and Pyrophyllite

Establishments primarily engaged in mining, quarrying, milling, or otherwise preparing talc, soapstone, or pyrophyllite.

Pyrophyllite mining
Soapstone quarrying

Steatite mining
Talc mining

1499 Miscellaneous Nonmetallic Minerals, Not Elsewhere Classified

Establishments primarily engaged in mining, quarrying, milling, or otherwise preparing nonmetallic minerals, not elsewhere classified. This industry includes the shaping of natural abrasive stones at the quarry. Establishments primarily engaged in the production of blast, grinding, or polishing sand are classified in Industry 1446.

Agate mining
Amethyst mining
Asbestos mining
Asphalt (native) mining
Asphalt rock mining
Bitumens (native) mining
Bituminous limestone quarrying
Bituminous sandstone quarrying
Burstone quarrying
Calcite mining
Catlinite mining
Corundum mining
Cryolite mining
Diamond mining, industrial
Diatomaceous earth mining
Diatomite mining
Emery mining
Fill dirt pits
Garnet mining
Gem stones (natural) mining
Gilsonite mining
Grahamite mining
Graphite mining
Greensand mining
Grinding peat
Grindstone quarrying
Iceland spar (optical grade calcite) mining
Jade mining
Meerschaum mining or quarrying
Mica mining
Millstone quarrying
Muscovite mining

Natural abrasives (except sand) mining
Oolite quarrying
Oxokerite mining
Peat humus mining
Peat mining
Perlite mining
Phlogopite mining
Pipestone mining
Pozzolana mining
Precious stones mining
Pulstone quarrying
Pumice mining
Pumicite mining
Quartz crystal (pure) mining
Reed peat mining
Rubbing stone quarrying
Ruby mining
Sapphire mining
Scoria mining
Screening peat
Scythestone quarrying
Sedge peat mining
Semiprecious stones mining
Sharpening stone quarrying
Shell mining
Shredding peat
Tripoli mining
Turquoise mining
Vermiculite mining
Volcanic ash mining
Whetstone quarrying
Wurtzite mining

Division C

Construction

The Division as a Whole

This division includes establishments (or kind-of-activity units) primarily engaged in construction. The term "construction" includes new work, additions, alterations, and repairs. Construction activities are generally administered or managed from a relatively fixed place of business, but the actual construction work is performed at one or more different sites which may be dispersed geographically. If a company has more than one relatively fixed place of business from which it undertakes or manages construction activities and for which separate data on the number of employees, payroll, receipts and other establishment-type records are maintained, each such place of business is considered a separate construction establishment. Each legal entity is considered a separate establishment, even where two or more legal entities carry out construction activities from the same place of business.

Three broad types of construction activity are covered: namely, (1) building construction by general contractors or by operative builders, (2) other construction by general contractors, and (3) construction by special trade contractors. Operative builders who build on their own account for resale are classified in this division. Investment builders who build structures on their own account for rental are classified in Major Group 65, Real Estate, but separate establishments primarily engaged in construction for the investment builder are classified in this division.

General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings and other projects of a similar character. General contractors in fields other than buildings, often referred to as heavy construction contractors, are primarily engaged in the construction of highways, streets, bridges and tunnels, docks and piers, dams and water projects; sewage collection, treatment, and disposal facilities; and storm sewer systems, air fields, heavy industrial facilities and other heavy construction which involves either earth moving or the erection of structures and appurtenances, other than buildings. The removal of overburden is classified in Division B, Mining.

Special trade contractors are primarily engaged in specialized construction activities such as plumbing, painting, electrical work and carpentry.

General contractors in both the building field and the heavy construction field usually assume responsibility for an entire construction project, but may subcontract to others those portions of the project requiring special skills or equipment. Special trade contractors may work for general contractors under subcontracts or may work directly for the owner of the property.

Force account construction (construction work performed by an establishment primarily engaged in some business other than construction, for its own account and use and by its own employees) is not included in this division but is classified according to the principal activity which is or will be normally carried on in the establishment. However, construction work performed by a separate establishment of a company for the company's own account is included in this division.

The installation of prefabricated building equipment and materials by general contractors and special trade contractors is classified in this division. Similar installation work performed as a service incidental to sale by employees of an establishment manufacturing or selling prefabricated equipment and materials is classified according to the principal activity of the establishment in the Manufacturing or Trade Divisions.

Establishments primarily engaged in the wholesale distribution and construction or installation of equipment manufactured by other establishments of the same company often present classification problems. Since value added is not available for distinguishing the relative importance of activities of manufacturers' sales branches versus installation or construction activities, payroll or number of employees may be used as measures yielding approximately the same results.

On this basis, separate establishments primarily engaged in the sale and erection of the following illustrative types of structures or integral parts of structures, generally site assembled from materials manufactured by other establishments of the same company, are classified in construction rather than manufacturers' sales branches:

- a. Steel work on bridges or buildings,
- b. Elevators and escalators,
- c. Sprinkler systems,
- d. Central air conditioning equipment,
- e. Communication equipment, and
- f. Insulation material.

On the other hand, separate establishments primarily engaged in the wholesale distribution and installation of the following illustrative types of preassembled equipment manufactured by other establishments of the same company will be classified as manufacturers' sales branches rather than construction:

- a. Major household appliances, such as refrigerators, dishwashers, clothes washers, dryers,
- b. Stoves and ranges,
- c. Machinery,
- d. Conveying equipment, and
- e. Partitions for banks, stores, restaurants, etc.

CONSTRUCTION

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Major Group 15.—BUILDING CONSTRUCTION—GENERAL CONTRACTORS AND OPERATIVE BUILDERS

The Major Group as a Whole

This major group includes general contractors and operative builders primarily engaged in the construction of residential, farm, industrial, commercial, or other buildings. General building contractors who combine a special trade with the contracting are included in this major group.

Group Industry
No. No.

152 GENERAL BUILDING CONTRACTORS—RESIDENTIAL BUILDINGS

1521 General Contractors—Single-Family Houses

General contractors primarily engaged in construction (including new work, additions, alterations, remodeling, and repair) of single-family houses.

Building alterations, single-family—
general contractors
Building construction, single-family—
general contractors
Custom builders, single-family houses—
general contractors
Designing and erecting (combined)
single-family homes—general con-
tractors
Home improvements, single-family—
general contractors
House construction, single-family—
general contractors
House: shell erection, single-family—
general contractors
One-family house construction—gen-
eral contractors

Prefabricated single-family house erec-
tion—general contractors
Remodeling buildings, single-family—
general contractors
Renovating buildings, single-family—
general contractors
Repairing buildings, single-family—
general contractors
Residential construction, single-fam-
ily—general contractors
Row house (single-family) construc-
tion—general contractors
Town house construction—general
contractors

1522 General Contractors—Residential Buildings, Other Than Single-Family

General contractors primarily engaged in construction (including new work, additions, alterations, remodeling, and repair) of residential buildings other than single-family houses.

Apartment building construction—gen-
eral contractors
Building alterations, other residen-
tial—general contractors
Building construction, other residen-
tial—general contractors
Custom builders, other residential—
general contractors
Designing and erecting (combined),
other residential—general contrac-
tors
Dormitory construction: general con-
tractors
Home improvements, other residen-
tial—general contractors

Hotel construction: general contrac-
tors
Motel construction: general contractors
Prefabricated building erection, other
residential: general contractors
Remodeling buildings, other residen-
tial—general contractors
Renovating buildings, other residen-
tial—general contractors
Repairing buildings, other residential—
general contractors
Residential construction, except single-
family—general contractors
Two-or-more family house construc-
tion: general contractors

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OPERATIVE BUILDERS

1531 Operative Builders

Builders primarily engaged in construction of single-family houses and other build-
ings for sale on their own account rather than as contractors.

Condominium developers on own ac-
count
Cooperative apartment developers on
own account

Operative builders on own account
Speculative builders

STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

154 GENERAL BUILDING CONTRACTORS—NONRESIDENTIAL BUILDINGS

1541 General Contractors—Industrial Buildings and Warehouses

General contractors primarily engaged in construction (including new work, additions, alterations, remodeling, and repair) of industrial buildings and warehouses, such as aluminum plants, automobile assembly plants, pharmaceutical manufacturing plants, and commercial warehouses.

Aluminum plant construction—general contractors
Building alterations, industrial and warehouse—general contractors
Building components manufacturing plant construction: general contractors
Building construction, industrial and warehouse—general contractors
Clean room construction—general contractors
Cold storage plant construction: general contractors
Commercial warehouse construction: general contractors
Custom builders, industrial and warehouse—general contractors
Designing and erecting (combined), industrial—general contractors
Dry cleaning plant construction: general contractors
Factory construction: general contractors
Food products manufacturing or packing plant: general contractors

Grain elevator construction—general contractors
Industrial building construction—general contractors
Industrial plant construction—general contractors
Paper pulp mill construction: general contractors
Pharmaceutical manufacturing plant construction: general contractors
Prefabricated building erection, industrial—general contractors
Remodeling buildings, industrial and warehouse—general contractors
Renovating buildings, industrial and warehouse—general contractors
Repairing buildings, industrial and warehouse—general contractors
Truck and automobile assembly plant construction: general contractors
Warehouse construction—general contractors

1542 General Contractors—Nonresidential Buildings, Other Than Industrial Buildings and Warehouses

General contractors primarily engaged in construction (including new work, additions, alterations, remodeling and repair) of nonresidential buildings, other than industrial buildings and warehouses. Included are nonresidential buildings, such as commercial, institutional, religious and amusement and recreational buildings. General contractors primarily engaged in construction of industrial buildings and warehouses are classified in Industry 1541.

Administration building construction—general contractors
Auditorium construction—general contractors
Bank building construction: general contractors
Building alterations, other nonresidential—general contractors
Building construction, other nonresidential—general contractors
Church, synagogue and related building construction: general contractors
Civic center construction: general contractors
Commercial building construction—general contractors
Custom builders, other nonresidential—general contractors
Designing and erecting (combined), commercial—general contractors
Farm building construction, except residential—general contractors
Fire station construction: general contractors
Garage construction: general contractors
Hospital construction: general contractors
Institutional building construction—general contractors

Mausoleum, cemetery: construction—general contractors
Museum construction: general contractors
Office building construction: general contractors
Passenger and freight terminal building construction—general contractors
Post offices: new construction, remodeling, etc.—general contractors
Prefabricated building erection, other nonresidential—general contractors
Remodeling buildings, other nonresidential—general contractors
Renovating buildings, other nonresidential—general contractors
Repairing buildings, other nonresidential—general contractors
Restaurant construction: general contractors
School building construction: general contractors
Service station construction: general contractors
Shopping center construction: general contractors
Silo construction, agricultural—general contractors
Store construction and alteration—general contractors

CONSTRUCTION

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Major Group 16.—CONSTRUCTION OTHER THAN BUILDING CONSTRUCTION—GENERAL CONTRACTORS

The Major Group as a Whole

This major group includes general contractors engaged in heavy construction (including new work, additions, improvements, maintenance, and repair) such as highways and streets, bridges, sewers, railroads, irrigation projects, flood control projects and marine construction, and miscellaneous types of construction work other than buildings. General heavy construction contractors who combine a special trade with the contracting are included in this major group.

Group Industry
No. No.

161 HIGHWAY AND STREET CONSTRUCTION, EXCEPT ELEVATED HIGHWAYS

1611 Highway and Street Construction, Except Elevated Highways

General contractors primarily engaged in the construction of roads, streets, alleys, sidewalks, guard rails, parkways, parking areas, airports, bridle paths and athletic fields. Special trade contractors primarily engaged in the construction of private driveways are classified in Industry 1771.

Airport construction, except buildings—general contractors
Alley construction—general contractors
Asphalt paving: roads, sidewalks, streets—general contractors
Athletic field construction—general contractors
Bridle path construction—general contractors
Concrete construction: roads, highways and streets—general contractors
Culvert construction—general contractors
Curb construction—general contractors
Golf course construction—general contractors
Grading for highways and airports—general contractors
Guard rail construction on highways—general contractors
Highway construction, except elevated highways—general contractors

Highway signs, installation of—general contractors
Parking lot construction—general contractors
Parkway construction—general contractors
Paving construction—general contractors
Resurfacing streets and highways—general contractors
Road construction, except elevated—general contractors
Street maintenance or repair—general contractors
Street paving—general contractors
Tennis court construction (outdoor)—general contractors
Trail building—general contractors
Trailer camp construction—general contractors

162 HEAVY CONSTRUCTION, EXCEPT HIGHWAY AND STREET CONSTRUCTION

1622 Bridge, Tunnel, and Elevated Highway Construction

General contractors primarily engaged in the construction of heavy projects, such as bridges, viaducts, elevated highways; and highway, pedestrian, and railway tunnels. General contractors engaged in subway construction are classified in Industry 1620.

Abutment, construction—general contractors
Bridge (vehicular, pedestrian, etc.) construction—general contractors
Causeway construction (built on structural supports)—general contractors
Construction: bridges, tunnels and elevated highways—general contractors
Grade crossing elimination (overpass or underpass)—general contractors

Highway (elevated) construction—general contractors
Trestle construction—general contractors
Tunnel (vehicular, pedestrian, etc.) construction—general contractors
Viaduct construction—general contractors

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

162

HEAVY CONSTRUCTION, EXCEPT HIGHWAY AND STREET CONSTRUCTION—**Continued****1622 Water, Sewer, Pipe Line, Communication and Power Line Construction**

General contractors primarily engaged in the construction of pipe lines, communication and power lines, and sewer and water mains.

Aqueduct construction—general contractors
 Cable laying construction—general contractors
 Conduit construction—general contractors
 Distribution lines (oil and gas field) construction—general contractors
 Gas main construction—general contractors
 Manhole construction—general contractors
 Natural gas compressing station construction—general contractors
 Pipe laying—general contractors
 Pipe line construction—general contractors
 Pipe line wrapping—general contractors
 Pole line construction—general contractors

Power line construction—general contractors
 Pumping station construction—general contractors
 Television and radio transmitting tower construction—general contractors
 Sewage collection and disposal line construction—general contractors
 Sewer (sanitary, storm, etc.) construction—general contractors
 Telegraph line construction—general contractors
 Telephone line construction—general contractors
 Transmission line construction—general contractors
 Water main construction—general contractors
 Water supply lines construction—general contractors

1629 Heavy Construction, Not Elsewhere Classified

General contractors primarily engaged in the construction of heavy projects, not elsewhere classified.

Blasting contractors, except building demolition
 Breakwater construction—general contractors
 Brush clearing or cutting—general contractors
 Caisson drilling—general contractors
 Canal construction—general contractors
 Central station (light and powerplant) construction—general contractors
 Channel construction—general contractors
 Channel cutoff construction—general contractors
 Chemical complex or facilities construction—general contractors
 Clearing of land—general contractors
 Cofferdam construction—general contractors
 Coke oven construction—general contractors
 Cutting right of way—general contractors
 Dam construction—general contractors
 Dike construction—general contractors
 Discharging station construction, mine—general contractors
 Dock construction—general contractors
 Drainage project construction—general contractors
 Dredging—general contractors
 Earthmoving, not connected with building construction—general contractors
 Electric light and power plant construction—general contractors
 Flood control project construction—general contractors
 Furnace construction for industrial plants—general contractors
 Harbor construction—general contractors

Hydroelectric plant construction—general contractors
 Industrial inclinerator construction—general contractors
 Industrial plant appurtenance construction—general contractors
 Irrigation projects, construction—general contractors
 Jetty construction—general contractors
 Kiln construction—general contractors
 Land clearing—general contractors
 Land drainage—general contractors
 Land leveling (irrigation)—general contractors
 Land reclamation—general contractors
 Levee construction—general contractors
 Light and power plant construction—general contractors
 Loading station construction, mine—general contractors
 Locks, waterways, etc. construction—general contractors
 Marine construction—general contractors
 Mine loading and discharging station construction—general contractors
 Mining appurtenance construction—general contractors
 Missile facilities construction and/or maintenance—general contractors
 Oil refinery construction—general contractors
 Oven construction, bakers'—general contractors
 Oven construction, for industrial plants—general contractors
 Petroleum refinery construction—general contractors
 Pier construction—general contractors
 Pile driving—general contractors
 Pond construction—general contractors

CONSTRUCTION

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Group Industry
No. No.
162

HEAVY CONSTRUCTION, EXCEPT HIGHWAY AND STREET CONSTRUCTION—
Continued

1620 Heavy Construction, Not Elsewhere Classified—Continued

Railroad construction—general contractors
Railway roadbed construction—general contractors
Reclamation projects construction—general contractors
Reservoir construction—general contractors
Revetment construction—general contractors
Rock removal, underwater—general contractors
Sewage treatment plant construction—general contractors
Ski tow erection—general contractors
Soil compacting service—general contractors
Submarine rock removal—general contractors

Subway construction—general contractors
Timber removal underwater—general contractors
Tipple construction—general contractors
Trenching—general contractors
Washerles (mining) construction—general contractors
Waste disposal plant construction—general contractors
Water treatment plant construction—general contractors
Water power project construction—general contractors
Waterway construction—general contractors
Wharf construction—general contractors

Major Group 17.—CONSTRUCTION—SPECIAL TRADE CONTRACTORS

The Major Group as a Whole

This major group includes contractors who undertake specialized activities such as plumbing, painting, plastering, carpentering, etc. Also included are establishments primarily engaged in miscellaneous specialized construction activities such as industrial machinery and equipment installation, grave excavation, gas leakage detection and water well drilling.

Special trade contractors may work on subcontract from the general contractor, performing only part of the work covered by the general contract, or they may work directly for the owner. Special trade contractors for the most part perform their work at the site of construction, although they also may have shops where they perform work incidental to the site job.

Group Industry
No. No.

171 PLUMBING, HEATING (EXCEPT ELECTRIC), AND AIR CONDITIONING

1711 Plumbing, Heating (Except Electric), and Air Conditioning

Special trade contractors primarily engaged in heating (except electric), plumbing, air conditioning, and similar work, or any combination of these types of work. Sheet metal work combined with any of the above types of work is included here, but roofing and sheet metal work contractors are classified in Industry 1761. Electric heating contractors are classified in Industry 1731.

Boller erection and installation—contractors
Drainage system installation (cesspool and septic tank)—contractors
Dry well (cesspool) construction—contractors
Fuel oil burner installation and servicing—contractors
Furnace repair—contractors
Heating equipment installation except electric—contractors
Heating, except electric, with or without sheet metal work—contractors
Mechanical contractors
Pipe and duct work—contractors
Plumbing and heating (except electric)—contractors
Plumbing repair—contractors

Plumbing, with or without sheet metal work—contractors
Refrigeration and freezer work—contractors
Sewer hook-ups and connections for buildings—contractors
Sheet metal work combined with heating or air conditioning—contractors
Sprinkler system installation—contractors
Steam fitting—contractors
Sump pump installation and servicing—contractors
Ventilating work, with or without sheet metal work—contractors
Water pump installation and servicing—contractors

172 PAINTING, PAPER HANGING, AND DECORATING

1721 Painting, Paper Hanging, and Decorating

Special trade contractors primarily engaged in painting, paper hanging and decorating. This industry does not include stores furnishing interior decorator services, which are classified in Major Group 57 according to the merchandise handled, or interior decorators without stocks, which are classified in Industry 7399.

Bridge painting—contractors
Decorating buildings—contractors
House painting—contractors
Painting of buildings and other structures except roofs—contractors

Paper hanging—contractors
Ship painting—contractors
Traffic lane painting—contractors
Whitewashing—contractors

CONSTRUCTION

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Group Industry
No. No.**173 ELECTRICAL WORK****1731 Electrical Work**

Special trade contractors primarily engaged in electrical work at the site. The construction of transmission lines is classified in Industry 1623, and electrical work carried on in repair shops in Group 762. Monitoring of burglar and fire alarms with incidental installation is classified in Industry 7393.

Burglar alarm installation—contractors
Cable splicing, electrical—contractors
Communication equipment installation—contractors
Electrical work—contractors
Fire alarm installation—contractors

Heating equipment installation, electric—contractors
Intercommunication equipment installation—contractors
Sound equipment installation—contractors
Telephone installation—contractors

174 MASONRY, STONEWORK, TILE SETTING, AND PLASTERING**1741 Masonry, Stone Setting, and Other Stonework**

Special trade contractors primarily engaged in masonry work, stone setting and other stonework. Special trade contractors primarily engaged in concrete work are classified in Industry 1771, those engaged in foundation work in Industry 1794, and those engaged in the construction of streets, highways, and alleys in Industry 1611.

Bricklaying—contractors
Cement block laying—contractors
Chimney construction and maintenance—contractors
Marble work, exterior construction—contractors

Masonry—contractors
Retaining wall construction—contractors
Stone setting—contractors
Stonework erection—contractors
Tuck pointing—contractors

1742 Plastering, Drywall, Acoustical and Insulation Work

Special trade contractors primarily engaged in applying plaster, plain or ornamental, including the installation of lathing and other appurtenances to receive plaster, or in drywall, acoustical and building insulation work.

Acoustical work—contractors
Drywall construction—contractors
Insulation installation, buildings—contractors
Lathing—contractors

Plastering, plain or ornamental—contractors
Sheetrock installation—contractors
Taping and bedding, plasterboard—contractors

1743 Terrazzo, Tile, Marble and Mosaic Work

Special trade contractors primarily engaged in setting and installing ceramic tile, marble, and mosaic, and in mixing marble particles and cement to make terrazzo at the site of construction. This industry does not include establishments manufacturing precast terrazzo steps, benches, and other terrazzo articles (Industry 3272).

Fresco work—contractors
Mantel work—contractors
Marble installation, interior; including finishing—contractors

Mosaic work—contractors
Terrazzo work—contractors
Tile installation, ceramic—contractors
Tile setting, ceramic—contractors

175 CARPENTERING AND FLOORING**1751 Carpentering**

Special trade contractors primarily engaged in carpentry work. Carpentry work done by general contractors engaged in building construction is classified in Major Group 15, and carpentry work done in repair shops in Industry 7699.

Carpentry work—contractors
Folding door installation—contractors
Garage door installation or erection—contractors
Joinery, ship—contractors

Ship joinery—contractors
Store fixture installation—contractors
Window and door (prefabricated) installation—contractors

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

175

CARPENTERING AND FLOORING—Continued**1752 Floor Laying and Other Floorwork, Not Elsewhere Classified**

Special trade contractors primarily engaged in laying, scraping and finishing parquet and other hardwood flooring. This industry includes the installation of asphalt tile, linoleum, and resilient flooring.

Asphalt tile installation—contractors
Carpet laying or removal service—contractors
Fireproof flooring construction—contractors
Floor laying, scraping, finishing, and refinishing—contractors

Hardwood flooring—contractors
Linoleum installation—contractors
Parquet flooring—contractors
Resilient floor laying—contractors
Vinyl tile and sheet installation—contractors
Wood flooring—contractors

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ROOFING AND SHEET METAL WORK**1761 Roofing and Sheet Metal Work**

Special trade contractors primarily engaged in the installation of roofing and siding. This industry does not include contractors engaged in sheet metal work in connection with plumbing, heating or air conditioning (Industry 1711).

Ceilings, metal: erection and repair—contractors
Coppersmithing, in connection with construction work—contractors
Downspout installation, metal—contractors
Gutter installation, metal—contractors
Repair of roofs—contractors
Roof spraying, painting, or coating—contractors

Roofing work, including repairing—contractors
Sheet metal work, except heating, or air conditioning—contractors
Siding—contractors
Skylight installation, metal—contractors
Tin-smithing, in connection with construction work—contractors

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CONCRETE WORK**1771 Concrete Work**

Special trade contractors primarily engaged in concrete work. This industry includes the construction of residential driveways and walks of all materials. Concrete work incidental to the construction of foundations and concrete work included in an excavation contract is classified in Industry 1794; and construction or paving of streets and highways is classified in Industry 1611.

Asphalting of private driveways and private parking areas—contractors
Blacktop work: private driveways and private parking areas—contractors
Concrete construction except paving and foundation—contractors

Floor surfacing, concrete—contractors
Grouting—contractors
Gunite contractors
Sidewalk construction—contractors
Stucco construction—contractors
Surfacing concrete floors—contractors

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WATER WELL DRILLING**1781 Water Well Drilling**

Special trade contractors primarily engaged in water well drilling.

Drilling water wells—contractors

Servicing water wells—contractors

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MISCELLANEOUS SPECIAL TRADE CONTRACTORS**1791 Structural Steel Erection**

Special trade contractors primarily engaged in the erection of structural steel.

Building front installation, metal—contractors
Concrete reinforcement, placing of—contractors
Elevator front installation, metal—contractors
Iron work, structural—contractors

Metal furring—contractors
Steel work, structural—contractors
Storage tanks, metal: erection—contractors
Store front installation, metal—contractors
Structural steel erection—contractors

1793 Glass and Glazing Work

Special trade contractors primarily engaged in glass and glazing work.

Glass installation—contractors
Glass work—contractors

Glazing work—contractors

CONSTRUCTION

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Group Industry
No. No.

179

MISCELLANEOUS SPECIAL TRADE CONTRACTORS—Continued**1794 Excavating and Foundation Work**

Special trade contractors primarily engaged in excavation and foundation work, including digging and loading. Contractors in this industry may also perform incidental concrete work, but contractors primarily engaged in concrete work are classified in Industry 1771.

Dirt moving, building construction—
contractors
Earthmoving, building construction—
contractors

Excavation work—contractors
Foundation work (excavation)—con-
tractors

1795 Wrecking and Demolition Work

Special trade contractors primarily engaged in the wrecking and demolition of buildings and other structures, and who may or may not sell material derived from demolishing operations.

Concrete breaking for streets and high-
ways—contractors
Demolition of buildings or other struc-
tures (except marine)—contractors
Dismantling steel oil tanks, except oil
field work—contractors

Wrecking of buildings or other struc-
tures (other than marine)—con-
tractors

1796 Installation or Erection of Building Equipment, Not Elsewhere Classified

Special trade contractors primarily engaged in the installation or erection of building equipment, not elsewhere classified, such as elevators, pneumatic tube systems and dust collecting equipment. This industry also includes contractors primarily engaged in the installation of or the dismantling of machinery or other industrial equipment.

Conveyor system installation—con-
tractors
Dismantling of machinery and other
industrial equipment—contractors
Dumbwaiter installation—contractors
Dust collecting equipment installa-
tion—contractors
Elevator installation and conversion—
contractors
Elevators, home-installation—contrac-
tors
Incinerator installation (small)—con-
tractors

Installation of machinery and other
industrial equipment—contractors
Machine rigging—contractors
Millwrights
Pneumatic tube system installation—
contractors
Power generating equipment installa-
tion—contractors
Revolving door installation—contrac-
tors
Vacuum cleaning systems, built-in—
contractors

1799 Special Trade Contractors, Not Elsewhere Classified

Special trade contractors primarily engaged in construction work, not elsewhere classified, such as construction of swimming pools and fences, erection and installation of ornamental metal work, house moving, shoring work, waterproofing, dampproofing, fireproofing, sandblasting and steam cleaning of building exteriors, and maintenance and upkeep of parking lots involving such services as light paving work, painting parking zones, and repairing fences, curbing, and walks.

Antenna installation, except household
type—contractors
Awning installation—contractors
Bowling alley installation and serv-
ice—contractors
Cable splicing service, nonelectrical—
contractors
Calking (construction)—contractors
Cleaning building exteriors—contrac-
tors
Cleaning new buildings after construc-
tion—contractors
Coating of concrete structures with
plastic—contractors
Core drilling (test borings for build-
ing construction)—contractors
Counter top installation—contractors
Dampproofing buildings—contractors
Dewatering—contractors
Diamond drilling (test borings for
building construction)—contractors

Epoxy application—contractors
Erection and dismantling of forms for
poured concrete—contractors
Fence construction—contractors
Fire escape installation—contractors
Fireproofing buildings—contractors
Forms for poured concrete erection and
dismantling of—contractors
Gas leakage detection—contractors
Gasoline pump installation—contrac-
tors
Glazing of concrete surfaces—contrac-
tors
Grave excavation—contractors
House moving—contractors
Insulation of pipes and boilers—con-
tractors
Lead burning—contractors
Lightning conductor erection—con-
tractors

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

179

MISCELLANEOUS SPECIAL TRADE CONTRACTORS—Continued**1799 Special Trade Contractors, Not Elsewhere Classified—Continued**

Ornamental metal work—contractors
 Paint and wallpaper stripping (removal)—contractors
 Parking lot maintenance (repaving, painting parking zones, repair, etc.)
 Plastic wall tile installation—contractors
 Posthole digging—contractors
 Sandblasting of building exteriors—contractors
 Scaffolding construction—contractors
 Service and repair of broadcasting stations—contractors
 Service station equipment installation, maintenance and repair—contractors
 Shoring and underpinning work—contractors

Steam cleaning of building exteriors—contractors
 Steeple jacks
 Swimming pool construction—contractors
 Television and radio stations, service and repair of—contractors
 Test boring for construction—contractors
 Tinting glass—contractors
 Wallpaper removal—contractors
 Waterproofing—contractors
 Weather stripping—contractors
 Welding contractors, operating at site of construction
 Window shade installation—contractors

Division D

Manufacturing

The Division as a Whole

The manufacturing division includes establishments engaged in the mechanical or chemical transformation of materials or substances into new products. These establishments are usually described as plants, factories, or mills and characteristically use power driven machines and materials handling equipment. Establishments engaged in assembling component parts of manufactured products are also considered manufacturing if the new product is neither a structure nor other fixed improvement. Also included is the blending of materials such as lubricating oils, plastics, resins, or liquors.

The materials processed by manufacturing establishments include products of agriculture, forestry, fishing, mining, and quarrying as well as products of other manufacturing establishments. The new product of a manufacturing establishment may be "finished" in the sense that it is ready for utilization or consumption, or it may be "semifinished" to become a raw material for an establishment engaged in further manufacturing. For example, the product of the copper smelter is the raw material used in electrolytic refineries; refined copper is the raw material used by copper wire mills; and copper wire is the raw material used by certain electrical equipment manufacturers.

The materials used by manufacturing establishments may be purchased directly from producers, obtained through customary trade channels, or secured without recourse to the market by transferring the product from one establishment to another which is under the same ownership. Manufacturing production is usually carried on for the wholesale market, for interplant transfer, or to order for industrial users, rather than for direct sale to the domestic consumer.

There are numerous borderline cases between manufacturing and other divisions of the classification system. Specific instances will be found in the descriptions of the individual industries. The following activities, although not always considered as manufacturing, are so classified:

Milk bottling and pasteurizing;
Fresh fish packaging (oyster shucking, fish filleting);
Apparel jobbing (assigning of materials to contract factories or shops for fabrication or other contract operations) as well as contracting on materials owned by others;
Publishing;
Ready-mixed concrete production;

Leather converting;
Logging;
Wood preserving;
Various service industries to the manufacturing trade, such as typesetting, engraving, plate printing, and preparing electrotyping and stereotype plates, but not blueprinting or photocopying services;

Electroplating, plating, metal heat treating, and polishing for the trade;

Lapidary work for the trade; Fabricating of signs and advertising displays.

There are also some manufacturing-type activities performed by establishments which are primarily engaged in activities covered by other divisions, and are thus not classified as manufacturing. A few of the more important examples are:

Agriculture, Forestry, and Fishing

Processing on farms is not considered manufacturing if the raw materials are grown on the farm and if the manufacturing activities are on a small scale without the extensive use of paid labor. Other exclusions are custom grist milling, threshing, and cotton ginning.

Mining

The dressing and beneficiating of ores; the breaking, washing, and grading of coal; the crushing and breaking of stone; and the crushing, grinding, or otherwise preparing of sand, gravel, and nonmetallic chemical and fertilizer minerals other than barite are classified in Mining.

Construction

Fabricating operations performed at the site of construction by contractors are not considered manufacturing, but the prefabrication of sheet metal, concrete, and terrazzo products and similar construction materials is included in the Manufacturing Division.

Wholesale and Retail Trade

Establishments engaged in the following types of operations are included in Wholesale or Retail Trade: cutting and selling purchased carcasses; preparing feed at grain elevators and farm supply stores; stemming leaf tobacco at wholesale establishments; and production of wiping rags. The breaking of bulk and redistribution in smaller lots, including packaging, repackaging, or bottling products such as liquors or chemicals, is also classified as Wholesale or Retail Trade. Also included in Retail Trade are establishments primarily engaged in selling, to the general public, products produced on the same premises from which they are sold, such as bakeries, candy stores, ice cream parlors, and custom tailors.

Services

Tire retreading and rebuilding, sign painting and lettering shops, and the production of motion picture films are classified in Services. Repair activities are classified as Services, except ship and boat building and repair, the rebuilding of machinery and equipment on a factory basis, and machine shop repair, all of which are classified as manufacturing.

ABBREVIATIONS USED FOR INDEX ITEMS

mach.—machinery.

m/fpm—made from purchased materials or materials transferred from another establishment.

milsc—made in the same establishment as the basic materials.

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Major Group 20.—FOOD AND KINDRED PRODUCTS*The Major Group as a Whole*

This major group includes establishments manufacturing or processing foods and beverages for human consumption, and certain related products, such as manufactured ice, chewing gum, vegetable and animal fats and oils, and prepared feeds for animals and fowls.

Group No. Industry No.

201 MEAT PRODUCTS**2011 Meat Packing Plants**

Establishments primarily engaged in the slaughtering, for their own account or on a contract basis for the trade, of cattle, hogs, sheep, lambs, and calves for meat to be sold or to be used on the same premises in canning and curing, and in making sausage, lard, and other products. Establishments primarily engaged in killing, dressing, and packing poultry, rabbits, and other small game are classified in Industry 2016; and those primarily engaged in killing and processing horses and other nonfood animals are classified in Industry 2047. Establishments primarily engaged in manufacturing sausages and meat specialties from purchased meats are classified in Industry 2013; and establishments primarily engaged in canning meat for baby food are classified in Industry 2032.

Abattoirs, on own account or for the trade: except nonfood animals
Bacon, slab and sliced: *mitos*
Beef, *mitos*
Blood meal
Canned meats, except baby foods: *mitos*
Cured meats, *mitos*
Hams and picnics, *mitos*
Hides, cured or uncured: *mitos*
Lamb, *mitos*
Lard, *mitos*

Meat extracts, *mitos*
Meat, *mitos*
Meat packing plants
Mutton, *mitos*
Pork, *mitos*
Sausages, *mitos*
Slaughtering plants: except nonfood animals
Variety meats (fresh edible organs), *mitos*
Veal, *mitos*

2013 Sausages and Other Prepared Meat Products

Establishments primarily engaged in manufacturing sausages, cured meats, smoked meats, canned meats, frozen meats, natural sausage casings, and other prepared meats and meat specialties, from purchased carcasses and other materials. Sausage kitchens and other prepared meat plants operated by packing houses as separate establishments also are included in this industry. Establishments primarily engaged in canning or otherwise processing poultry, rabbits, and other small game are classified in Industries 2016 and 2017. Establishments primarily engaged in the cutting up and resale of purchased fresh carcasses are classified in trade industries. Establishments primarily engaged in canning meat for baby food are classified in Industry 2032.

Bacon, side and sliced: *m/psm*
Beef, dried: *m/psm*
Bologna, *m/psm*
Boneless meat, *m/psm*
Calf's foot jelly
Canned meats, except baby foods: *m/psm*
Casings, sausage: natural
Corned beef
Corned meats, *m/psm*
Cured meats: brined, dried, and salted—*m/psm*
Dried meats, *m/psm*
Frankfurters, canned or not canned: *m/psm*
Ham: boiled, boneless, roasted, and smoked—*m/psm*
Ham, canned: *m/psm*
Head cheese, *m/psm*
Lard, *m/psm*
Luncheon meat, canned

Meat extracts, *m/psm*
Meat products: cooked, cured, frozen, smoked, spiced, and boneless—*m/psm*
Pastrami, *m/psm*
Pigs' feet, cooked and pickled: *m/psm*
Pork: pickled, cured, salted, or smoked—*m/psm*
Potted meats
Puddings, meat: *m/psm*
Roast beef
Sandwich spreads, meat: *m/psm*
Sausage casings, natural
Sausages, *m/psm*
Scrapple, *m/psm*
Smoked meats, *m/psm*
Spreads, sandwich: meat—*m/psm*
Stew, beef and lamb
Tripe, *m/psm*
Vienna sausage, canned or not canned

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**201 MEAT PRODUCTS—Continued****2016 Poultry Dressing Plants**

Establishments primarily engaged in slaughtering and dressing poultry for their own account or on a contract basis for the trade for meat to be sold or to be used on the same premises in further processing, including cooking, smoking, raw-boning, canning, freezing, and dehydrating. This industry also includes the killing, dressing, and packing of rabbits and other small game. Establishments primarily engaged in processing purchased carcasses are classified in Industry 2017.

Chickens: slaughtering, dressing, and packing for the wholesale trade
Ducks, dressed and packed
Game, small: frozen—*m/fac*
Geese, dressed and packed
Poultry, frozen: *m/fac*

Poultry slaughtering, dressing, and packing for the wholesale trade
Rabbits: slaughtering, dressing, and packing for the wholesale trade
Turkeys: slaughtering, dressing, and packing for the wholesale trade

2017 Poultry and Egg Processing

Establishments primarily engaged in the preparation of processed poultry products from purchased carcasses, including cooking, smoking, raw-boning, canning, freezing, and dehydrating, for their own account or on a contract basis for the trade; or in the drying, freezing, and breaking of eggs. The cleaning, oil treating, packing, and grading of eggs are classified in Industry 5144. Establishments primarily engaged in the cutting up and resale of purchased fresh carcasses are classified in the trade industries.

Chicken, canned: solid pack, deviled, and potted—*m/pm*
Egg albumen
Eggs: canned, dehydrated, desiccated, frozen, processed

Eggs: drying, freezing, and breaking
Poultry, canned: *m/pm*
Poultry, frozen: *m/pm*

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DAIRY PRODUCTS

This group includes establishments primarily engaged in: (1) manufacturing creamery butter; natural cheese; condensed and evaporated milk; ice cream and frozen desserts; and special dairy products, such as processed cheese and malted milk; and (2) processing (pasteurizing, homogenizing, vitaminizing, bottling) fluid milk and cream for wholesale or retail distribution. Independently operated milk receiving stations primarily engaged in the assembly and reshipment of bulk milk for the use of manufacturing or processing plants are classified in Industry 5143.

2021 Creamery Butter

Establishments primarily engaged in manufacturing creamery butter.

Anhydrous milkfat
Butter, creamery and whey

Butter oil

2022 Cheese, Natural and Processed

Establishments primarily engaged in manufacturing all types of natural cheese (except cottage cheese—Industry 2026), processed cheese, cheese foods, and cheese spreads.

Cheese, all types and varieties except cottage cheese
Cheese, natural
Cheese, processed

Cheese spreads, pastes, and cheese-like preparations
Processed cheese
Sandwich spreads, cheese

MANUFACTURING

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Group Industry
No. No.

202

DAIRY PRODUCTS—Continued**2023 Condensed and Evaporated Milk**

Establishments primarily engaged in manufacturing condensed and evaporated milk and related products, including ice cream mix and ice milk mix made for sale as such, and dry milk products. Also included is the manufacture of nondairy-base cream substitutes and dietary supplements.

Baby formula: fresh, processed, and bottled
Buttermilk: concentrated, condensed, dried, evaporated, and powdered
Casein, dry and wet
Cream substitutes
Cream: dried, powdered, and canned
Dry milk products: whole milk, nonfat milk, buttermilk, whey, and cream
Ice cream mix, unfrozen: made in condensed and evaporated milk plants
Ice milk mix, unfrozen: made in condensed and evaporated milk plants

Lactose, edible
Malted milk
Milk: concentrated, condensed, dried, evaporated, and powdered
Milk, whole: canned
Skim milk: concentrated, dried, and powdered
Sugar of milk
Whey: concentrated, condensed, dried, evaporated, and powdered

2024 Ice Cream and Frozen Desserts

Establishments primarily engaged in manufacturing ice cream and other frozen desserts.

Custard, frozen
Desserts, frozen
Ice cream: bulk, packaged, molded, on sticks, etc.
Ice milk: bulk, packaged, molded, on sticks, etc.

Ices and sherbets
Mellorine
Mellorine-type products
Parfait
Sherbets and ices
Spumoni

2026 Fluid Milk

Establishments primarily engaged in processing (pasteurizing, homogenizing, vitaminizing, bottling) and distributing fluid milk and cream, and related products; including cottage cheese.

Buttermilk, cultured
Chocolate milk
Cottage cheese, including pot, bakers', and farmers' cheese
Cream, aerated
Cream, bottled
Cream, plastic
Cream, sour
Flavored milk drinks
Kumys

Milk, acidophilus
Milk, bottled
Milk processing (pasteurizing, homogenizing, bottling) and distribution
Milk products, made from fresh skim milk
Whipped cream
Whipped topping, butterfat base
Yoghurt
Zoolak

203

CANNED AND PRESERVED FRUITS AND VEGETABLES**2032 Canned Specialties**

Establishment primarily engaged in canning specialty products, such as baby foods, "native foods," health foods, and soups except seafood. Establishments primarily engaged in canning seafoods other than frozen are classified in Industry 2091, frozen seafoods in Industry 2092, and those primarily engaged in quick freezing canned specialties in Industry 2038.

Baby foods, canned (including meats)
Baked beans with pork, canned
Bean sprouts, canned
Beans, baked: without meat—canned
Beans with meat, canned
Broth, except seafood: canned
Cakes: Italian, Spanish, Mexican, Chinese, etc.
Chicken broth and soup, canned
Chili con carne, canned
Chinese foods, canned
Chop suey, canned
Chow mein, canned
Enchiladas, canned
Fish cakes, canned

Food specialties, canned
Health foods, canned
Italian foods, canned
Macaroni, canned
Meat pies, canned
Mexican foods, canned
Minced meat, canned
"Native" foods, canned
Puddings, fig and plum—canned
Ravioli, canned
Soups, except seafood: canned
Spaghetti, canned
Spanish foods, canned
Tamales, canned
Tortillas, canned

Group No.	Industry No.
203	

CANNED AND PRESERVED FRUITS AND VEGETABLES—Continued

2033 Canned Fruits, Vegetables, Preserves, Jams, and Jellies

Establishments primarily engaged in canning fruits and vegetables, and fruit and vegetable juices; and in manufacturing catsup and similar tomato sauces, preserves, jams, and jellies. Establishments primarily engaged in canning seafoods (except frozen) are classified in Industry 2091; and canned specialties, baby foods and soups (except seafood) in Industry 2032.

Artichokes in olive oil, bottled
Barbecue sauce
Catsup
Cherries, maraschino
Chili sauce, tomato
Fruit butters
Fruits : canned, bottled, and preserved
Hominy, canned
Jams
Jellies, edible
Juices, fruit and vegetable : canned,
bottled, and bulk
Ketchup
Krant, canned

Marmalade
Mushrooms, canned
Nectar, fruit
Olives, including stuffed : bottled
Pastes, fruit and vegetable
Preserves
Purees, fruit and vegetable
Sauerkraut, canned
Seasonings (prepared sauces), tomato
Tomato juice and cocktails, bottled and
canned
Tomato paste
Tomato sauce
Vegetables, canned

2034 Dried and Dehydrated Fruits, Vegetables, and Soup Mixes

Establishments primarily engaged in sun drying or artificially dehydrating fruits and vegetables, or in manufacturing packaged soup mixes from dehydrated ingredients. Establishments primarily engaged in the grading and marketing of farm dried fruits, such as prunes and raisins, are classified in Industry 5149.

Dates, dried
Dehydrated fruits, vegetables, and
soups
Freeze-dry food processing, fruits and
vegetables
Fruits, sulphured
Nuts, dried or dehydrated
Olives, dried

Potato flakes, granules and other dehydrated potato products
Prunes, dried
Raisins
Soup mixes
Soup powders
Vegetables, sulphured

2035 Pickled Fruits and Vegetables, Vegetable Sauces and Seasonings, and Salad Dressings

Establishments primarily engaged in pickling and brining fruits and vegetables, and in manufacturing salad dressings, vegetable relishes, sauces, and seasonings. Establishments primarily engaged in manufacturing catsup and similar tomato sauces are classified in Industry 2033, and those packing purchased pickles and olives in trade industries.

Brining of fruits and vegetables
Cherries, brined
Dressings, food
French dressing
Fruits, pickled and brined
Horseradish, prepared
Kraut, bulk
Mayonnaise
Mustard, prepared (wet)
Olives, brined : bulk
Onions, pickled
Pickles and pickle salting
Relishes, fruit and vegetable
Russian dressing

Salad dressings, raw and cooked
Sandwich spreads, salad dressing base
Sauces, meat (seasoning) : except
catsup
Sauces, vegetable, except tomato
Sauerkraut, bulk
Seasonings (prepared sauces), vegeta-
ble : except tomato
Soy sauce
Thousand Island dressing
Vegetable sauces, except tomato
Vegetables, pickled and brined
Vinegar pickles and relishes
Worcestershire sauce

2037 Frozen Fruits, Fruit Juices and Vegetables

Establishments primarily engaged in freezing and cold packing (freezing) fruits, fruit juices, and vegetables.

Concentrates, frozen fruit juice
Dried citrus pulp
Frozen fruits, fruit juices, and
vegetables
Fruit juices, frozen

**Fruits, quick frozen and cold pack
(frozen)**
**Vegetables, quick frozen and cold pack
(frozen)**

MANUFACTURING

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Group Industry
No. No.**203 CANNED AND PRESERVED FRUITS AND VEGETABLES—Continued****2036 Frozen Specialties**

Establishments primarily engaged in freezing and cold packing (freezing) food specialties, such as frozen dinners and frozen pizza.

Baked goods, frozen : except bread and bread-type rolls
Dinners, frozen : packaged
Food specialties, frozen
Frozen dinners, packaged
Meals, frozen

"Native" foods, frozen
Pies, frozen
Pizza, frozen
Soups, frozen : except seafood soups
Spaghetti and meat balls, frozen
Waffles, frozen

204 GRAIN MILL PRODUCTS**2041 Flour and Other Grain Mill Products**

Establishments primarily engaged in milling flour or meal from grain, except rice. The products of flour mills may be sold plain or in the form of prepared mixes or doughs for specific purposes. Establishments primarily engaged in manufacturing prepared flour mixes or doughs from purchased ingredients are classified in Industry 2045, and rice milling in Industry 2044.

Bran and middlings, except rice
Bread and bread-type roll mixes, *m/tes*
Buckwheat flour
Cake flour, *m/tes*
Cereals, cracked grain : *m/tes*
Corn grits and flakes, for brewers' use
Dough, biscuit : canned—*m/tes*
Doughs, refrigerated : *m/tes*
Durum flour
Farina, *m/tes*
Flour : blended, prepared, or self-rising—*m/tes*
Flour : buckwheat, corn, rye, and wheat

Flour mills
Flour mixes, *m/tes*
Graham flour
Granular wheat flour
Grits and flakes, corn : for brewers' use
Hominy grits, except breakfast food
Meal, corn
Milling of grains, except rice
Pizza mixes and prepared dough, *m/tes*
Semolina (flour)
Sorghum grain flour
Wheat germ
Wheat mill feed

2043 Cereal Breakfast Foods

Establishments primarily engaged in manufacturing cereal breakfast foods and related preparations.

Breakfast foods, cereal
Coffee substitutes, made from grain
Corn flakes
Corn, hulled (cereal breakfast food)
Farina (cereal breakfast food)
Hominy grits, prepared as cereal breakfast food

Infants' foods, cereal type
Oatmeal (cereal breakfast food)
Oats, rolled (cereal breakfast food)
Rice breakfast foods
Wheat flakes

2044 Rice Milling

Establishments primarily engaged in cleaning and polishing rice, and in manufacturing rice flour or meal. Other important products of this industry include brown rice, milled rice (including polished rice), rice polish, and rice bran.

Flour, rice
Milling of rice
Polishing of rice
Rice bran, flour, and meal
Rice, brewers'

Rice, brown
Rice cleaning and polishing
Rice polish
Rice, vitamin and mineral enriched

2045 Blended and Prepared Flour

Establishments primarily engaged in the preparation of blended flours and flour mixes or doughs from purchased flour. Establishments primarily engaged in milling flour from grain are classified in Industry 2041.

Biscuit flour, prepared : *m/psm*
Bread and bread-type roll mixes, *m/psm*
Cake flour, *m/psm*
Cake mixes, prepared : *m/psm*
Dough, biscuit : canned—*m/psm*
Doughnut flour, prepared : *m/psm*
Doughs, refrigerated : *m/psm*
Farina, except cereal breakfast food : *m/psm*

Flour : blended, prepared, or self-rising—*m/psm*
Gingerbread mix, prepared : *m/psm*
Pancake flour, prepared : *m/psm*
Phosphated flour, *m/psm*
Pizza mixes and prepared doughs, *m/psm*

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

204 GRAIN MILL PRODUCTS—Continued

2046 Wet Corn Milling

Establishments primarily engaged in milling corn or sorghum grain (milo) by the wet process, and producing starch, sirup, oil, sugar, and byproducts, such as gluten feed and meal. Establishments primarily engaged in manufacturing starch from other vegetable sources (potato, wheat, etc.) are also included. Establishments primarily engaged in manufacturing table sirups from corn sirup and other ingredients, and those manufacturing starch base dessert powders, are classified in Industry 2099.

Corn oil cake and meal
Corn sirup, dried
Corn starch
Dextrine
Dextrose
Feed, gluten
Hydroly
Meal, gluten
Oil, corn : crude and refined
Potato starch

Rice starch
Sirup, corn : unmixed
Starch, instant
Starch, liquid
Starches, edible and industrial
Steepwater concentrate
Sugar, corn
Tapioca
Wheat starch

2047 Dog, Cat and Other Pet Food

Establishments primarily engaged in manufacturing dog, cat and other pet food from cereal, meat, and other ingredients. These preparations may be canned, frozen, or dry. This industry also includes establishments slaughtering animals for pet food. Establishments primarily engaged in manufacturing feed for animals, other than pets, are classified in Industry 2048.

Bird food, prepared
Dog and cat food
Horse meat : canned, fresh, or frozen

Pet food : canned, frozen, dry
Slaughtering of nonfood animals

2048 Prepared Feeds and Feed Ingredients for Animals and Fowls, Not Elsewhere Classified

Establishments primarily engaged in manufacturing prepared feeds and feed ingredients and adjuncts, for animals and fowls, not elsewhere classified. This industry includes poultry and livestock feed and feed ingredients, such as alfalfa meal, feed supplements, and feed concentrates and feed premixes. Establishments primarily engaged in manufacturing pet foods are classified in Industry 2047.

Alfalfa meal, dehydrated or sun-cured
Alfalfa, prepared as feed for animals
Animal feeds, prepared
Buttermilk emulsion for animal food
Chicken feeds, prepared
Citrus seed meal
Feather meal, made from purchased materials
Feed concentrates
Feed premixes
Feeds, prepared (including mineral) :
for animals and fowls—except pets
Feed supplements

Kelp meal and pellets
Livestock feeds
Meal, alfalfa
Meal, bone : prepared as feed for animals and fowls
Mineral feed supplements
Oats : crimped, pulverized and rolled (except breakfast food)
Oyster shells, ground : used as feed for animals and fowls
Poultry feeds
Shell crushing, for feed
Stock feeds, dry

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BAKERY PRODUCTS

2051 Bread and Other Bakery Products, Except Cookies and Crackers

Establishments primarily engaged in manufacturing bread, cakes, and other "perishable" bakery products. Establishments manufacturing bakery products for sale primarily for home service delivery, or through one or more non-baking retail outlets, are included in this industry. Establishments primarily engaged in producing "dry" bakery products, such as biscuits, crackers, and cookies are classified in Industry 2052. Establishments producing bakery products primarily for direct sale on the premises to household consumers are classified in Retail Trade, Industry 5462.

Bagels
Bakeries, manufacturing for home service delivery

Bakeries : wholesale and retail combined
Bakery products, partially cooked (not frozen)

MANUFACTURING

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Group Industry
No. No.**205 BAKERY PRODUCTS—Continued****2051 Bread and Other Bakery Products, Except Cookies and Crackers—Continued**

Bakery products, "perishable": bread, cakes, doughnuts, pastries, etc.	Crullers
Biscuits, baked: baking powder and raised	Knishes
Bread, brown: Boston and other— canned	Pastries: Danish, French, etc.
Buns (bakery products)	Pies, except meat pies
Charlotte Russe (bakery product)	Rolls (bakery products)
	Sponge goods (bakery products)
	Sweet yeast goods

2052 Cookies and Crackers

Establishments primarily engaged in manufacturing cookies, crackers, pretzels, and similar "dry" bakery products. Establishments primarily engaged in producing "perishable" bakery products are classified in Industry 2051.

Bakery products, "dry": biscuits, crackers, pretzels, etc.	Cracker meal and crumbs
Biscuits, baked: dry, except baking powder and raised biscuit	Crackers: graham, soda, etc.
Communion wafers	Matzoths
Cones, ice cream	Rusk, machine-made
Cookies	Saltines
	Zwieback, machine-made

206 SUGAR AND CONFECTIONERY PRODUCTS**2061 Cane Sugar, Except Refining Only**

Establishments primarily engaged in manufacturing raw sugar, sirup, or finished (granulated or clarified) cane sugar from sugarcane. Establishments primarily engaged in refining sugar from purchased raw cane sirup or sugar sirups are classified in Industry 2062.

Granulated cane sugar, made from sugarcane	Molasses, made from sugarcane
Molasses, blackstrap	Sirup, cane: made from sugarcane

2062 Cane Sugar Refining

Establishments primarily engaged in refining purchased raw cane sugar and sugar sirup.

Cane sugar, refined: made from pur- chased raw cane sugar or sugar sirup	Refiners' blackstrap molasses
Granulated cane sugar, made in refineries from purchased sugar	Refiners' sirup, cane
Refineries, cane sugar	Sirup, cane: made in sugar refineries from purchased sugar
	Sugar, invert

2063 Beet Sugar

Establishments primarily engaged in manufacturing sugar from sugar beets.

Dried beet pulp	Molasses, made from sugar beets
Liquid sugar or sirup, beet sugar refining	Sugar, beet

2065 Candy and Other Confectionery Products

Establishments primarily engaged in manufacturing candy, including chocolate candy, salted nuts, other confections and related products. Establishments primarily engaged in manufacturing solid chocolate bars are classified in Industry 2066 and chewing gum in Industry 2067. Establishments primarily engaged in manufacturing confectionery for direct sale on the premises are classified in Industry 5441, and those primarily engaged in shelling and roasting nuts are classified in Industry 5145.

Bars, candy: including chocolate cov- ered bars	Fruits: candied, glazed, and crystal- lized
Cake ornaments, confectionery	Fudge (candy)
Candy, except solid chocolate	Halvah
Chewing candy (not chewing gum)	Licorice candy
Chocolate candy, except solid choco- late	Lozenges, candy: nonmedicated
Confectionery	Marshmallows
Cough drops, except pharmaceutical preparations	Marsipan
Dates: chocolate covered, sugared, and stuffed	Nuts, glace
Fruit peel products: candied, glazed, glace, and crystallized	Nuts, salted or candy covered: pack- aged
	Popcorn balls and other treated pop- corn products, packaged

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Group Industry

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SUGAR AND CONFECTIONERY PRODUCTS—Continued

2066 Chocolate and Cocoa Products

Establishments primarily engaged in shelling, roasting, and grinding cacao beans for the purpose of making chocolate liquor, from which cocoa powder and cocoa butter are derived, and in the further manufacture of solid chocolate bars and chocolate coatings. Establishments primarily engaged in manufacturing products, except candy, from purchased chocolate and cocoa are classified in Industry 2099, and chocolate candy in Industry 2065.

Baking chocolate
Bars, candy: solid chocolate
Cacao bean products: chocolate, cocoa
butter, and cocoa
Cacao beans: shelling, roasting, and
grinding for making chocolate
liquor
Candy, solid chocolate
Chocolate bars

Chocolate coatings and sirups, made in chocolate plants
Chocolate liquor
Chocolate, sweetened or unsweetened
Cocoa butter
Cocoa, powdered: mixed with other substances—made in chocolate plants

2067 Chewing Gum

Establishments primarily engaged in manufacturing chewing gum or chewing gum base.

Chewing gum

Chewing gum base

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FATS AND OILS

2074 Cottonseed Oil Mills

Establishments primarily engaged in manufacturing cottonseed oil, and byproduct cake, meal, and linters. Establishments primarily engaged in refining cottonseed oil into edible cooking oils are classified in Industry 2079.

Cottonseed oil, cake, and meal: made
in cottonseed oil mills

2075 Soybean Oil Mills

Establishments primarily engaged in manufacturing soybean oil, and byproduct cake and meal. Establishments primarily engaged in refining soybean oil into edible cooking oils are classified in Industry 2079.

Lecithin

Soybean oil, cake, and meal

2076 Vegetable Oil Mills, Except Corn, Cottonseed, and Soybean

Establishments primarily engaged in manufacturing vegetable oils and byproduct cake and meal, except corn, cottonseed, and soybean. Establishments primarily engaged in manufacturing corn oil and its byproducts are classified in Industry 2046, those which are refining vegetable oils into edible cooking oils are classified in Industry 2079, and those refining these oils for medicinal purposes in Industry 2833.

Castor oil and pomace
Coconut oil
Linseed oil, cake, and meal
Oils, vegetable: except corn, cotton-
seed, and soybean
Oiticica oil
Palm kernel oil

Peanut oil, cake, and meal: made in
peanut oil mills
Safflower oil
Tallow, vegetable
Tung oil
Walnut oil, except artists' materials

2077 Animal and Marine Fats and Oils

Establishments primarily engaged in manufacturing animal oils, including fish oil and other marine animal oils and fish and animal meal; and those rendering inedible grease and tallow from animal fat, bones, and meat scraps. Establishments primarily engaged in manufacturing lard and edible tallow and stearin are classified in Group 201; those refining marine animal oils for medicinal purposes in Industry 2833; and those manufacturing fatty acids in Industry 2899.

Fish liver oils, crude
Fish meal
Fish oil and fish oil meal
Meat meal and tankage
Neat's-foot oil
Oil and meal, fish

Oil, neat's-foot
Oils, animal
Oils, fish and marine animal: herring,
menhaden, whale (refined), sardine
Rendering plants, grease and tallow
Stearin, animal: inedible

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Group Industry
No. No.

207 FATS AND OILS—Continued

2079 Shortening, Table Oils, Margarine and Other Edible Fats and Oils, Not Elsewhere Classified

Establishments primarily engaged in manufacturing shortening, table oils, margarine, and other edible fats and oils, not elsewhere classified, by further processing of purchased animal and vegetable oils. Establishments primarily engaged in producing corn oil are classified in Industry 2046.

Butterine
Cottonseed oil, refined: not made in
cottonseed oil mills
Margarine
Nut margarine
Oleomargarine

Olive oil
Peanut oil, refined: not made in pea-
nut oil mills
Shortenings, compound and vegetable
Vegetable cooking and salad oils, ex-
cept corn oil: refined

208 BEVERAGES

2082 Malt Beverages

Establishments primarily engaged in manufacturing all kinds of malt beverages. Establishments primarily engaged in bottling purchased malt beverages are classified in Industry 5181.

Ale
Beer (alcoholic beverage)
Breweries
Brewers' grain
Liquors, malt

Malt extract, liquors, and sirups
Near beer
Porter (alcoholic beverage)
Stout (alcoholic beverage)

2083 Malt

Establishments primarily engaged in manufacturing malt or malt byproducts from barley or other grains.

Malt: barley, rye, wheat, and corn
Malt byproducts

Malthouses
Sprouts, made in malthouses

2084 Wines, Brandy, and Brandy Spirits

Establishments primarily engaged in manufacturing wines, brandy, and brandy spirits. This industry also includes bonded storerooms which are engaged in blending wines. Establishments primarily bottling purchased wines, brandy, and brandy spirits, but which do not manufacture wines and brandy, are classified in Industry 5182.

Brandy
Brandy spirits
Storerooms, bonded: engaged in blend-
ing wines

Wines: still, sparkling, and artificially
carbonated

2085 Distilled, Rectified, and Blended Liquors

Establishments primarily engaged in manufacturing alcoholic liquors by distillation and rectification, and in manufacturing cordials and alcoholic cocktails by blending processes or by mixing liquors and other ingredients. Establishments primarily engaged in manufacturing industrial alcohol are classified in Industry 2869, and those only bottling purchased liquors in Industry 5182.

Applejack
Cocktails (alcoholic beverages)
Cordials, alcoholic
Distillers dried grains and solubles
Ethyl alcohol for medicinal and
beverage purposes
Gin (alcoholic beverage)
Grain alcohol for medicinal and
beverage purposes

Liquors: distilled, rectified, and
blended—except brandy
Rum
Spirits, neutral except fruit: for
beverage purposes
Vodka
Whiskey: bourbon, rye, scotch type,
and corn

Group No.	Industry No.
208	1

BEVERAGES—Continued

2086 Bottled and Canned Soft Drinks and Carbonated Waters

Establishments primarily engaged in manufacturing soft drinks (nonalcoholic beverages) and carbonated waters. Establishments primarily engaged in manufacturing fruit and vegetable juices are classified in Group 203, fruit sirups for flavoring in Industry 2087, and cider in Industry 2099. Establishments primarily engaged in bottling natural spring waters are classified in Industry 5149.

Beer, birch and root: bottled or canned
Beverages, nonalcoholic: bottled or
canned
Carbonated beverages, nonalcoholic:
bottled or canned
Drinks, fresh fruit: bottled or canned
Ginger ale, bottled or canned
Mineral water, carbonated: bottled or
canned

Nonalcoholic beverages, bottled or
canned
Soft drinks, bottled or canned
Still beverages, nonalcoholic: bottled
or canned
Water, pasteurized: bottled or canned

2087 Flavoring Extracts and Flavoring Sirups, Not Elsewhere Classified

Establishments primarily engaged in manufacturing flavoring extracts, sirups, and fruit juices, not elsewhere classified, for soda fountain use or for the manufacture of soft drinks, and colors for bakers' and confectioners' use. Establishments primarily engaged in manufacturing chocolate sirup are classified in Industry 2066 if from cacao beans and in Industry 2099 if from purchased chocolate.

Beverage bases
Bitters (flavoring concentrates)
Burnt sugar (food color)
Coffee flavorings and sirups
Colors for bakers' and confectioners' use, except synthetic
Cordials, nonalcoholic
Drink powders and concentrates

Flavoring concentrates
Flavoring extracts, pastes, powders,
and sirups
Food colorings, except synthetic
Food glaze, for glazing foods (coseen)
Fruit juices, concentrated: for
fountain use
Fruits, crushed: for soda fountain use

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MISCELLANEOUS FOOD PREPARATIONS AND KINDRED PRODUCTS

2091 Canned and Cured Fish and Seafoods

Establishments primarily engaged in cooking and canning fish, shrimp, oysters, clams, crabs, and other seafoods, including soups; and those engaged in smoking, salting, drying or otherwise curing fish for the trade. Establishments primarily engaged in shucking and packing fresh oysters in nonsealed containers, or in freezing and packaging fresh fish, are classified in Industry 2092.

Canned fish, crustacea, and mollusks
Caviar, canned and preserved
Clam bouillon, broth, chowder, juice:
bottled or canned
Codfish: smoked, salted, dried, and
pickled
Crab meat, canned and preserved
Finnan haddie (smoked haddock)
Fish: boneless, cured, dried, pickled,
salted, and smoked
Fish, canned
Fish egg bait, canned
Herring: smoked, salted, dried, and
pickled

Mackerel: smoked, salted, dried, and pickled
Oysters, canned and preserved
Salmon: smoked, salted, dried, canned and pickled
Sardines, canned
Seafood products, canned
Shellfish, canned
Shrimp, canned
Soup, seafood: canned
Tuna fish, canned

2092 Fresh or Frozen Packaged Fish and Seafoods

Establishments primarily engaged in preparing fresh and raw or cooked frozen packaged fish and other seafood, including soups. This industry also includes establishments primarily engaged in the shucking and packing of fresh oysters in nonsealed containers.

Crab meat, fresh: packed in nonsealed containers
Crab meat picking
Fish fillets
Fish: fresh, quick frozen, and cold pack (frozen)—packaged
Fish sticks
Frozen prepared fish
Oysters, fresh: shucking and packing in nonsealed containers

Seafoods: fresh, quick frozen, and cold pack (frozen)—packaged
Shellfish, quick frozen and cold pack (frozen)
Shrimp, quick frozen and cold pack (frozen)
Soups, seafood: frozen

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Group Industry
No. No.

200 MISCELLANEOUS FOOD PREPARATIONS AND KINDRED PRODUCTS—Con.

2095 Roasted Coffee

Establishments primarily engaged in roasting coffee, and in manufacturing coffee concentrates and extracts in powdered, liquid or frozen form, including freeze-dried.

Coffee extracts
Coffee roasting, except by wholesale grocers

Coffee, instant and freeze-dried

2097 Manufactured Ice

Establishments primarily engaged in manufacturing ice for sale. Ice plants operated by public utility companies are included in this industry when separate reports are available. When separate reports are not available, they should be classified in Major Group 49. Establishments primarily engaged in manufacturing dry ice are classified in Industry 2813.

Block ice
Can ice
Ice cubes

Ice, manufactured or artificial: except dry ice
Ice plants, operated by public utilities

2098 Macaroni, Spaghetti, Vermicelli, and Noodles

Establishments primarily engaged in manufacturing dry macaroni, spaghetti, vermicelli, and noodles. Establishments primarily engaged in manufacturing canned macaroni, spaghetti, etc., are classified in Industry 2032.

Macaroni and products, dry: including alphabets, rings, seashells, etc.
Noodles: egg, plain, and water

Spaghetti, except canned
Vermicelli

2099 Food Preparations, Not Elsewhere Classified

Establishments primarily engaged in manufacturing prepared foods and miscellaneous food specialties, not elsewhere classified, such as baking powder, yeast, and other leavening compounds; chocolate and cocoa products except confectionery, made from purchased materials; peanut butter; packaged tea including instant; ground spices; potato, corn, and other chips; and vinegar and cider.

Almond pastes
Bakers' malt
Baking powder
Beans, baked: except canned
Bouillon cubes
Box lunches, for sale off premises
Bread crumbs, not made in bakeries
Butter, ladle
Butter, renovated and processed
Chicory root, dried
Chili pepper or powder
Chocolate, instant: m/ps
Chocolate sirup, m/ps
Cider
Cocoa, instant: m/ps
Coconut, desiccated and shredded
Cole slaw, in bulk
Corn chips
Desserts, ready-to-mix
Emulsifiers, food
Fillings, cake or pie: except fruits, vegetables and meat
Gelatin dessert preparations
Honey, strained and bottled
Jelly, cornucob (gelatin)
Leavening compounds, prepared

Marshmallow creme
Meat seasonings, except sauces
Molasses, mixed or blended: m/ps
Pancake sirup, blended and mixed
Peanut butter
Pectin
Pepper, chili
Pizza, refrigerated: not frozen
Popcorn, packaged but not popped
Pork and beans, except canned
Potato chips
Sandwiches, assembled and packaged: for wholesale market
Sirups, sweetening: honey, maple sirup, sorghum
Sorghum, including custom refining
Spices, including grinding
Sugar grinding
Sugar, industrial maple: made in plants producing maple sirup
Sugar, powdered: m/ps
Tea blending
Tortillas, in bulk
Vegetables, peeled for the trade
Vinegar
Yeast

The Major Group as a Whole

Group No.	Industry No.
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2111 Cigarettes

Cigaretten

2121 Cigars

Cigarillos
Cigars

Stories

2131 Tobacco (Chewing and Smoking) and Snuff

Tobacco : chewing, smoking, and snuff

2141 Tobacco Stemming and Redrying

Establishments primarily engaged in the stemming and redrying of tobacco. Establishments which sell leaf tobacco as merchant wholesalers, agents, or brokers, and which also may be engaged in stemming tobacco, are classified in Major Group 51. Leaf tobacco warehouses which also may be engaged in stemming tobacco are classified in Major Group 42.

Tobacco thrashing (mechanical stem-
ming)

Tobacco, stemming and redrying of

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Major Group 22.—TEXTILE MILL PRODUCTS*The Major Group as a Whole*

This major group includes establishments engaged in performing any of the following operations: (1) preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage; (2) manufacturing broad woven fabric, narrow woven fabric, knit fabric, and carpets and rugs from yarn; (3) dyeing and finishing fiber, yarn, fabric, and knit apparel; (4) coating, waterproofing, or otherwise treating fabric; (5) the integrated manufacture of knit apparel and other finished articles from yarn; and (6) the manufacture of felt goods, lace goods, nonwoven fabrics, and miscellaneous textiles.

This classification makes no distinction between the two types of organizations which operate in the textile industry: (1) the "integrated" mill which purchases materials, produces textiles and related articles within the establishment, and sells the finished products; and (2) the "contract" or "commission" mill which processes materials owned by others. Converters or other nonmanufacturing establishments which assign materials to contract mills for processing (other than knitting) are classified in nonmanufacturing industries; establishments which assign yarns to outside contractors or commission knitters for the production of knit products are classified in Group 225.

Group Industry
No. No.

221 BROAD WOVEN FABRIC MILLS, COTTON**2211 Broad Woven Fabric Mills, Cotton**

Establishments primarily engaged in weaving fabrics over 12 inches in width, wholly or chiefly by weight of cotton. Establishments primarily engaged in weaving cotton carpets and rugs are classified in Industry 2271; those tufting carpets and rugs in Industry 2272; those making tire cord and fabric in Industry 2296; and finishers of cotton broad woven fabrics in Industry 2261.

Airplane cloth, cotton
Alpacas, cotton
Automotive fabrics, cotton
Awning stripes, cotton: *misc*
Bags and bagging, cotton: made in weaving mills
Balloon cloth, cotton
Bandage cloths, cotton
Bark cloth, cotton
Basket weave fabrics, cotton
Bathmats, cotton: made in weaving mills
Batiste, cotton
Bedspreads, cotton: made in weaving mills
Bird's-eye diaper cloth, cotton
Blankets and blanketings, cotton: *misc*
Bombazine, cotton
Book cloth, *misc*
Broadcloth, cotton
Brocade, cotton
Brocatelle, cotton
Buckram
Bunting cloths, *misc*
Butter cloths
Cambric, cotton
Camouflage nets, *misc*
Canton flannels, cotton
Canvas, *misc*
Card roll fabrics, cotton
Casement cloth, cotton
Chafar fabrics, cotton
Chambrays
Cheese bandages, *misc*
Cheesecloth
Chenilles, tufted textile: *misc*
Cheviots, cotton
Chints, cotton
Corduroys, cotton
Corset fabrics, cotton
Cotton broad woven goods

Cottonades
Coutil, cotton
Coverts, cotton
Crash toweling, cotton
Crepes, cotton
Cretonne, cotton
Crimoline
Damasks, cotton
Denims
Diaper fabrics
Dimities
Dishcloths, made in weaving mills
Draperies and drapery fabrics, cotton: *misc*
Dress fabrics, cotton
Drills, cotton
Duck, cotton
Duvetyn, cotton
Elastic fabrics, cotton: over 12 inches in width
Express stripes, cotton
Fabrics, broad woven: cotton
Filter cloth, cotton
Flannelette
Flannels, cotton
Frieze, cotton
Friezette, cotton
Furniture denim
Gabardine, cotton
Galatea, cotton
Gause, *misc*
Ginghams
Glass toweling, cotton
Glove fabrics, cotton: *misc*
Grosgrain, cotton
Handkerchief fabrics, cotton
Hickory stripes, cotton
Huck toweling
Interlining material, cotton
Jacquard woven fabrics, cotton
Jean fabrics

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Group Industry
No. No.

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BROAD WOVEN FABRIC MILLS, COTTON—Continued**2211 Broad Woven Fabric Mills, Cotton—Continued**

Laundry fabrics, cotton
Laundry nets, *mitse*
Lawns, cotton
Leno fabrics, cotton
Long cloth, cotton
Luggage fabrics, cotton
Madras, cotton
Marquisettes, cotton
Matelasse, cotton
Messaline, cotton
Mitten flannel, cotton
Moleskins, *mitse*
Momie crepe, cotton
Mosquito netting, *mitse*
Muslin, cotton
Nainsook, cotton
Nets and nettings, *mitse*
Opaline, cotton
Organdy, cotton
Osanaburgs
Outing flannel, cotton
Oxfords (cotton fabrics)
Pajama checks, textile
Percale
Percaline, cotton
Elle fabrics, cotton
Pillow tubing, *mitse*
Pillowcases, *mitse*
Pin checks, cotton
Pin stripes, cotton
Piques, cotton
Plaids, cotton
Pillase crepe, cotton
Pinshes, cotton
Pocketing twill, cotton
Pongee, cotton
Poplin, cotton
Press cloth
Print cloths, cotton
Batine, cotton
Rep, cotton
Romaines
Sail cloth, *mitse*

Sateens, cotton
Scrim, cotton
Scrub cloths, *mitse*
Seat cover cloth, automobile: cotton
Seersuckers, cotton
Sheets and sheetings, cotton: *mitse*
Shirting fabrics, cotton
Shoe fabrics, *mitse*
Silecia, cotton
Slip cover fabrics, cotton
Stretch fabrics, cotton
Suiting fabrics, cotton
Surgical fabrics, cotton
Table cover fabrics, cotton
Table damask, cotton
Tapestry fabrics, cotton
Tartan, cotton
Tentage, *mitse*
Terry woven fabrics, cotton
Tickings, *mitse*
Tobacco cloths, *mitse*
Towels and toweling, cotton: made in
weaving mills
Tracing cloth, cotton
Trouserings, cotton
Tubing, seamless: cotton
Twill, cotton
Typewriter ribbon cloth
Umbrella cloth, cotton
Underwear fabrics, except knit: cotton
Upholstery fabrics, cotton
Velours
Velveteens
Velvets, cotton
Voiles, cotton
Waffle cloth, cotton
Washcloths, except knit: made in
weaving mills
Weaving mills, cotton broad woven
fabrics
Wigan, cotton
Window shade cloth, cotton
Yarn-dyed fabrics, cotton

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BROAD WOVEN FABRIC MILLS, MAN-MADE FIBER AND SILK**2221 Broad Woven Fabric Mills, Man-Made Fiber and Silk**

Establishments primarily engaged in weaving fabrics over 12 inches in width, wholly or chiefly by weight of silk and man-made fibers including glass. Establishments primarily engaged in weaving carpets and rugs from these fibers are classified in Industry 2271; those tufting carpets and rugs from these fibers in Industry 2272; those making tire cord and fabric in Industry 2296; and finishers of man-made fiber and silk broad woven goods in Industry 2262.

Acetate broad woven fabrics
Acrylic broad woven fabrics
Automotive fabrics, man-made fiber
Bedspreads, silk and man-made fiber:
mitse
Blanketings, man-made fiber
Broad woven fabrics, silk and man-
made fiber
Canton crepes
Crepe satins
Draperies and drapery fabrics, man-
made fiber and silk: *mitse*
Dress fabrics, man-made fiber and silk
Duvetyn, man-made fiber and silk
Elastic fabrics, man-made fiber and
silk: over 12 inches in width
Fabrics, broad woven: man-made fiber
and silk

Fallies
Fiberglass fabrics
Flat crepes
French crepes
Fur-type fabrics, man-made fiber
Georgettes
Glass broad woven fabrics
Jacquard woven fabrics, man-made
fiber and silk
Leno fabrics, man-made fiber and silk
Lining fabrics, man-made fiber and silk
Linings, rayon or silk: *mitse*
Marquisettes, man-made fiber
Modacrylic broad woven fabrics
Necktie fabrics, man-made fiber and
silk: broad woven
Nylon broad woven fabrics
Nitril broad woven fabrics

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Group Industry
No. No.**222 BROAD WOVEN FABRIC MILLS, MAN-MADE FIBER AND SILK—Continued****2221 Broad Woven Fabric Mills, Man-Made Fiber and Silk—Continued**

Paper broad woven fabrics	Spandex broad woven fabrics
Parachute fabrics	Suiting fabrics, man-made fiber and silk
Pile fabrics, man-made fiber and silk	Taffetas
Pinusbes, man-made fiber and silk	Tapestry fabrics, man-made fiber and silk
Polyester broad woven fabrics	Textile mills, broad woven: silk, and man-made fiber including glass
Polyethylene broad woven fabrics	Textile warping, on a contract basis
Polypropylene broad woven fabrics	Twills, man-made fiber
Pongee, man-made fiber and silk	Underwear fabrics, except knit: man-made fiber and silk
Poplin, man-made fiber	Upholstery fabrics, man-made fiber and silk
Quilts, man-made fiber and silk: <i>mittee</i>	Velvets, man-made fiber and silk
Rayon broad woven fabrics	Vinal broad woven fabrics
Saran broad woven fabrics	Vinyon broad woven fabrics
Satins	Voles, man-made fiber and silk
Serges, man-made fiber	
Shantung, man-made fiber and silk	
Shirting fabrics, man-made fiber and silk	
Silk broad woven fabrics	
Slip cover fabrics, man-made fiber and silk	

223 BROAD WOVEN FABRIC MILLS, WOOL (INCLUDING DYEING AND FINISHING)**2231 Broad Woven Fabric Mills, Wool (Including Dyeing and Finishing)**

Establishments primarily engaged in weaving fabrics over 12 inches in width, wholly or chiefly by weight of wool, mohair, or similar animal fibers; those dyeing and finishing all woven wool fabrics or dyeing wool, tops, or yarn; and those shrinking and sponging wool goods for the trade. Establishments primarily engaged in weaving wool carpets and rugs are classified in Industry 2271, and those tufting wool carpets and rugs in Industry 2272.

Alpacas, mohair: woven	Narrow fabrics: dyeing and finishing of wool, mohair, and similar fibers
Bale dyeing of yarn and fabrics, of wool and similar fibers: except knit	Overcoatings, of wool, mohair, and similar fibers
Billiard cloths, <i>mittee</i>	Pantings: of wool, mohair, and similar fibers
Blankets and blanketings, of wool and similar fibers: <i>mittee</i>	Papermakers' felts, woven of wool, mohair, and similar fibers
Bleaching yarn and fabrics, of wool and similar fibers: except knit fabric	Raw stock dyeing and finishing of wool, mohair, and similar fibers
Broad woven fabrics, of wool, mohair, and similar fibers	Refinishing and sponging cloths of wool, mohair, etc., for the trade
Burling and mending cloth for the trade	Serges of wool, mohair, and similar fibers
Calendering of wool, mohair, and similar fiber fabrics: except knit	Shrinking cloth of wool, mohair, and similar fibers: for the trade
Cloth, wool: mending—for the trade	Skirtings
Dyeing and finishing of wool and similar fibers: except knit	Sponging and refinishing cloth of wool and similar fibers: for the trade
Fabric, animal fiber: broad woven	Suitings of wool, mohair, and similar fibers
Fabric finishing of wool, mohair, and similar fibers: except knit	Trouserings of wool, mohair, and similar fibers
Fabrics, broad woven: of wool, mohair, and similar fibers	Upholstery fabrics, wool
Felts, of wool, mohair, and similar fibers: woven	Vat dyeing of tops, yarn, and textiles: of animal fibers—except knit
Finishing of wool, mohair, and similar fiber fabrics: except knit	Weaving mills, broad woven fabrics: of wool, mohair, and similar fibers
Flannels of wool, mohair, and similar fibers	Worsted fabrics, broad woven
Haircloth of wool, mohair, and similar fibers	Yarn bleaching, dyeing, and finishing: of wool, mohair, and similar fibers
Mill menders, contract: wool, mohair, and similar fibers	
Napping of wool, mohair, and similar fiber fabrics	

224 NARROW FABRICS AND OTHER SMALLWARES MILLS: COTTON, WOOL, SILK, AND MAN-MADE FIBER**2241 Narrow Fabrics and Other Smallwares Mills: Cotton, Wool, Silk, and Man-Made Fiber**

Establishments primarily engaged in weaving or braiding fabrics 12 inches or narrower in width of cotton, wool, silk, and man-made fibers, including glass fibers. Establishments primarily engaged in producing fabric covered elastic yarn or thread are also included in this industry.

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**224 NARROW FABRICS AND OTHER SMALLWARES MILLS: COTTON, WOOL, SILK, AND MAN-MADE FIBER—Continued****2241 Narrow Fabrics and Other Smallwares Mills: Cotton, Wool, Silk, and Man-Made Fiber—Continued**

Apparel webbing
Auto wind lace
Bandings, spindle
Beltings, woven or braided
Bindings, textile: *misses*
Braids, textile
Braids, tubular nylon and plastic
Cords, fabric
Corset laces
Cotton narrow fabrics
Elastic narrow fabrics, woven or braided
Elastic webbing
Electric insulating tapes and braids, except plastic
Fabric, animal fiber: narrow woven
Fringes, weaving
Gimps, *misses*
Glass narrow fabrics
Glove lining fabrics
Hat band fabrics
Hose fabric, tubular
Insulating tapes and braids, electric
Labels, woven
Lace, auto wind

Laces, corset and shoe: textile
Lacings, *misses*
Narrow woven fabrics: cotton, wool, silk, glass, and man-made fiber
Rayon narrow fabrics
Ribbons, *misses*
Rickrack braid
Rubber thread and yarns, fabric covered
Shoe laces, except leather
Slide fastener tapes
Spindle banding
Strapping webs
Tapes, fabric
Textile mills, narrow woven: fibers including glass
Tie tapes, woven or braided
Trimmings, textile: *misses*
Venetian blind tapes
Weaving mills: cotton, wool, silk, and man-made fiber narrow fabrics
Webbing, woven: except jute
Wicking
Zipper tape

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KNITTING MILLS

This group includes three types of organizations which operate in the knitting mill industry: (1) the "integrated" mill which purchases materials, produces textiles and related articles within the establishment, and sells the finished products; (2) the "contract" or "commission" mill which processes materials owned by others; and (3) establishments commonly known as jobbers or converters of knit goods which perform the entrepreneurial functions of a manufacturing company, such as buying the raw material, designing and preparing samples, and assigning yarns to others for knitting products on their account.

2251 Women's Full Length and Knee Length Hosiery

Establishments primarily engaged in knitting, dyeing, or finishing women's and misses' full length and knee length hosiery, both seamless and full-fashioned, and panty hose.

Dyeing and finishing women's full and knee length hosiery
Hosiery, women's and misses' full length and knee length
Panty hose

Stockings, women's and misses' full length and knee length
Stretch tights, seamless and full-fashioned

2252 Hosiery, Except Women's Full Length and Knee Length Hosiery

Establishments primarily engaged in knitting, dyeing, or finishing hosiery except women's and misses' full length and knee length seamless and full-fashioned hosiery and panty hose.

Ankle (hosiery), seamless or full-fashioned
Dyeing and finishing hosiery, except women's full and knee length
Hosiery, except women's and misses' full length and knee length hosiery
Infants' and children's hosiery

Men's, boys', and girls' hosiery
Slipper socks, *misses*
Socks, seamless and full-fashioned
Socks, slipper: *misses*
Stockings, except women's and misses' full length and knee length stocking

2253 Knit Outerwear Mills

Establishments primarily engaged in knitting outerwear from yarn, or in manufacturing outerwear from knit fabric produced in the same establishment. Establishments primarily engaged in hand knitting outerwear for the trade are included in this industry. Establishments primarily engaged in knitting gloves and mittens are classified in Industry 2259, and those manufacturing outerwear from purchased knit fabric in Major Group 23.

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No. Industry
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KNITTING MILLS—Continued**2253 Knit Outerwear Mills—Continued**

Apparel, except gloves, hosiery and underwear—*mitas*
 Basque shirts, *mitas*
 Bathing suits, *mitas*
 Bathrobes, *mitas*
 Beachwear, *mitas*
 Bedjackets, *mitas*
 Blouses, *mitas*
 Body stockings, *mitas*
 Caps, *mitas*
 Collar and cuff sets, *mitas*
 Dresses, hand knit: for the trade
 Dresses, *mitas*
 Dyeing and finishing knit outerwear, except hosiery and gloves
 Hand knitting of outerwear, for the trade
 Hats, *mitas*
 Headwear, *mitas*

Housecoats, *mitas*
 Jerseys and sweaters, *mitas*
 Leotards, *mitas*
 Lounging robes, *mitas*
 Mufflers, *mitas*
 Neckties, *mitas*
 Outerwear, except hosiery and gloves: *mitas*
 Scarfs, *mitas*
 Shawls, *mitas*
 Shirts (outerwear), *mitas*
 Shoulderettes, *mitas*
 Ski suits, *mitas*
 Shirts, *mitas*
 Slacks or pants, *mitas*
 Suits, *mitas*
 Sweaters and sweater coats, *mitas*
 Wristlets, *mitas*

2254 Knit Underwear Mills

Establishments primarily engaged in knitting underwear and nightwear from yarn, or in manufacturing underwear and nightwear from knit fabric produced in the same establishment. Establishments primarily engaged in manufacturing underwear and nightwear from purchased knit fabric are classified in Major Group 23.

Drawers, apparel: *mitas*
 Dyeing and finishing knit underwear
 Nightwear, *mitas*
 Panties, *mitas*
 Shirts (underwear), *mitas*

Slips, *mitas*
 Step-ins, *mitas*
 Underwear, *mitas*
 Union suits, *mitas*

2257 Circular Knit Fabric Mills

Establishments primarily engaged in knitting circular (tubular) fabric, or in dyeing or finishing circular (tubular) knit fabric. Establishments primarily engaged in knitting, dyeing, or finishing warp fabric are classified in Industry 2258.

Circular knit fabrics of all materials
 Cloth, circular knit: *mitas*
 Dyeing and finishing circular knit fabrics

Fabric, circular knit
 Jersey cloth, *mitas*
 Pile fabric, circular knit

2258 Warp Knit Fabric Mills

Establishments primarily engaged in knitting warp (flat fabric, or in dyeing or finishing warp (flat) knit fabric. Establishments primarily engaged in knitting, dyeing or finishing circular fabric are classified in Industry 2257.

Cloth, warp knit: *mitas*
 Dyeing and finishing warp knit fabrics
 Finishing of warp or flat knit fabrics
 Lace, knit
 Mosquito netting, warp knit: *mitas*

Netting, knit
 Pile fabric, warp or flat knit
 Tricot fabrics
 Warp or flat knit fabrics of all materials

2259 Knitting Mills, Not Elsewhere Classified

Establishments primarily engaged in knitting gloves and other articles, not elsewhere classified. Establishments primarily engaged in manufacturing woven or knit fabric gloves and mittens from purchased fabrics are classified in Industry 2381.

Bags and bagging, made in knitting mills
 Bedspreads, made in knitting mills
 Curtains, made in knitting mills
 Disabcloths, made in knitting mills
 Dyeing and finishing knit gloves and mittens
 Elastic girdle blanks, made in knitting mills

Girdles (elastic) and other foundation garments, *mitas*
 Gloves, made in knitting mills
 Linings, shoe: made in knitting mills
 Mat bagging, made in knitting mills
 Mittens, made in knitting mills
 Stockinette, made in knitting mills
 Towels, made in knitting mills
 Washcloths, made in knitting mills

DYEING AND FINISHING TEXTILES, EXCEPT WOOL FABRICS AND KNIT GOODS

Establishments primarily engaged in finishing purchased cotton broad woven fabrics, or finishing such fabrics on a commission basis. These finishing operations include bleaching, dyeing, printing (roller, screen, flock, plisse), and other mechanical finishing such as preshrinking, calendering and napping. This industry also includes the shrinking and sponging of cloth for the trade, and chemical finishing for water repellency, fire resistance, and mildew proofing. Establishments primarily engaged in finishing wool broad woven fabrics are classified in Industry 2231; knit goods in Group 225; and those coating or impregnating fabrics in Industry 2295.

Preshrinking cotton fabrics, for the
 trade
 Printing and finishing of cotton broad
 woven fabrics
 Redfinishing and sponging cotton broad
 woven fabrics, for the trade
 Shrinking cotton cloth, for the trade
 Sponging and redfinishing cotton cloth,
 for the trade
 Snedding cotton broad woven goods
 Teaseling cotton broad woven goods
 Water repellency finishing of cotton
 broad woven fabrics

Establishments primarily engaged in finishing purchased man-made fiber and silk broad woven fabrics or finishing such fabrics on a commission basis. These finishing operations include bleaching, dyeing, printing (roller, screen, flock, plisse), and other mechanical finishing such as preshrinking, calendering, and napping. Establishments primarily engaged in finishing wool broad woven fabrics are classified in Industry 2231; knit goods in Group 225; and those coating or impregnating fabrics in Industry 2295.

Napping of man-made fiber and silk broad woven fabrics
 Preshrinking man-made fiber and silk broad woven fabrics, for the trade
 Printing man-made fiber and silk broad woven fabrics
 Shrinking man-made fiber and silk cloth, for the trade
 Silk broad woven fabric finishing
 Sueding man-made fiber and silk broad woven fabrics
 Teaseling man-made fiber and silk broad woven fabrics

Establishments primarily engaged in dyeing and finishing textiles, not elsewhere classified, such as bleaching, dyeing, printing and finishing of raw stock, yarn, braided goods, and narrow fabrics, except wool and knit fabrics. These establishments perform finishing operations on purchased textiles or on a commission basis.

Gassing yarn
Labels, cotton: printed
Linen fabrics: dyeing, finishing, and
printing
Mercerizing yarn, braided goods, and
narrow fabrics: except knit and wool
Mill enders, contract: cotton, silk, and
man-made fiber
Printing narrow fabrics, except knit
and wool

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Group Industry
No. No.
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FLOOR COVERING MILLS**2271 Woven Carpets and Rugs**

Establishments primarily engaged in weaving carpets and rugs from any textile yarn. Important products of this industry include Axminster, Wilton, velvet, and similar woven carpets and rugs; and woven automobile and aircraft floor coverings.

Aircraft floor coverings, woven
Art squares, woven textile fiber
Automobile floor coverings, woven
Axminster carpets
Bathmats, woven textile fiber: not
made in weaving mills
Carpets, woven textile fiber
Chenille rugs

Floor coverings, woven textile fiber
Mats and matting, woven cotton and
wool
Rugs, machine woven
Smyrna carpets and rugs, machine
woven
Wilton carpets

2272 Tufted Carpets and Rugs

Establishments primarily engaged in tufting carpets and rugs from any textile fiber. Important products of this industry include tufted carpets, rugs, scatter rugs, and bathmats and bathmat sets except terry woven. Finishers of these products also are included in this industry.

Bathmat sets, tufted
Bathmats, tufted
Carpets, tufted
Dyeing and finishing of tufted rugs
and carpets

Rugs, tufted
Scatter rugs, tufted

2279 Carpets and Rugs, Not Elsewhere Classified

Establishments primarily engaged in manufacturing rugs, carpets, art squares, floor mattings, needle punch carpeting, and door mats and mattings from twisted paper, grasses, reeds, coir, sisal, jute or rags. Establishments primarily engaged in manufacturing hard surface floor coverings, except rubber and cork, are classified in Industry 3996.

Art squares: twisted paper, grass, reed,
coir, sisal, jute, and rag
Carpets: twisted paper, grass, reed,
coir, sisal, jute, and rag
Door mats: twisted paper, grass, reed,
coir, sisal, jute, and rag
Floor coverings: twisted paper, grass,
reed, coir, sisal, jute, and rag

Mats and matting: twisted paper,
grass, reed, coir, sisal, jute, and rag
Rugs, braided and hooked
Rugs: twisted paper, grass, reed, coir,
sisal, jute, and rag

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YARN AND THREAD MILLS**2281 Yarn Spinning Mills: Cotton, Man-Made Fibers and Silk**

Establishments primarily engaged in spinning yarn wholly or chiefly by weight of cotton, man-made fibers, or silk. Establishments primarily engaged in dyeing or finishing purchased yarns or finishing yarns on a commission basis are classified in Industry 2269.

Acetate yarn, made from purchased
staple: spun
Acrylic yarn, made from purchased
staple: spun
Carded yarn, cotton
Carpet yarn, cotton
Combed yarn, cotton
Cordage yarn, cotton
Crochet yarn: cotton, silk, and man-
made staple
Darning yarn: cotton, silk, and man-
made staple
Embroidery yarn: cotton, silk and
man-made staple
Knitting yarn: cotton, silk, and man-
made staple
Man-made staple fiber yarn, spun
Modacrylic yarn, made from purchased
staple: spun
Nylon yarn, spinning of staple

Nytril yarn, made from purchased
staple: spun
Polyester yarn, made from purchased
staple: spun
Polypropylene yarn, made from pur-
chased staple: spun
Rayon yarn, made from purchased
staple: spun
Saran yarn, made from purchased
staple: spun
Spinning yarn: cotton, silk, and man-
made staple
Vinal yarn, made from purchased
staple: spun
Vinyon yarn, made from purchased
staple: spun
Weaving yarn: cotton, silk, and man-
made staple
Yarn, cotton, silk, and man-made
staple

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

228

YARN AND THREAD MILLS—Continued

2282 Yarn Texturizing, Throwing, Twisting, and Winding Mills: Cotton, Man-Made Fibers and Silk

Establishments primarily engaged in texturizing, throwing, twisting, winding or spooling yarn wholly or chiefly by weight of cotton, man-made fibers or silk. Establishments primarily engaged in dyeing or finishing purchased yarns or finishing yarns on a commission basis are classified in Industry 2289.

Acetate filament yarn: throwing, twisting, winding, or spooling
Acrylic and modacrylic filament yarn: throwing, winding, or spooling
Beaming yarns, for the trade
Nylon yarn: throwing, twisting, winding or spooling of continuous filament
Polyester filament yarn: throwing, twisting, winding, or spooling
Polypropylene filament yarn: throwing, twisting, winding, or spooling
Rayon yarn, made from purchased filament yarn: throwing, twisting, winding

Saran filament yarn: throwing, twisting, winding, or spooling
Spooling yarn: cotton, silk, and man-made fiber continuous filament
Textured yarns
Throwing, winding, or spooling of filament yarn: silk and man-made fiber
Twisting yarn: silk and man-made fiber continuous filament
Vinal filament yarn: throwing, twisting, winding, or spooling
Vinyon filament yarn: throwing, twisting, winding, or spooling
Winding yarn: cotton, silk, and man-made fiber continuous filament

2283 Yarn Mills, Wool, Including Carpet and Rug Yarn

Establishments primarily engaged in spinning, twisting, winding or spooling yarn (including carpet and rug yarn) wholly or chiefly by weight of wool, mohair, or similar animal fibers. Establishments primarily engaged in dyeing or finishing purchased wool yarn or finishing wool yarn on a commission basis are classified in Industry 2231.

Animal fiber yarn: spinning, twisting, winding, or spooling
Crochet yarn: wool, mohair, or similar animal fiber
Darning yarn: wool, mohair, or similar animal fiber
Embroidery yarn: wool, mohair, or similar animal fiber
Knitting yarn: wool, mohair, or similar animal fiber
Mohair yarn: spinning, twisting, winding, or spooling
Rug yarn: wool, mohair, or similar animal fiber

Thread: wool, mohair, or similar animal fiber
Twisting yarn: wool, mohair, or similar animal fiber
Weaving yarn: wool, mohair, or similar animal fiber
Wool yarn: spinning, twisting, winding, or spooling
Yarn, carpet and rug: animal fiber—spinning, twisting, and spooling
Yarn: weaving, machine knitting, and hand knitting animal fiber

2284 Thread Mills

Establishments primarily engaged in manufacturing thread from natural or man-made fiber except flax (Industry 2299) and wool (Industry 2283). Important products of this industry include sewing, crochet, darning, embroidery, tatting, hand knitting, and other handicraft threads.

Cotton thread
Crochet thread: cotton, silk, and man-made fiber
Darning thread: cotton, silk, and man-made fiber
Embroidery thread: cotton, silk, and man-made fiber
Hand knitting thread: cotton, silk, and man-made fiber
Man-made fiber thread
Nylon thread
Polyester thread

Rayon thread
Sewing thread: cotton, silk, and man-made fiber
Silk thread
Spinning thread: cotton, silk, and man-made fiber
Tatting thread: cotton, silk, and man-made fiber
Thread, except linen or wool: bleaching, dyeing, and finishing
Thread: except linen, wool, mohair or similar animal fibers

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Group Industry
No. No.
229

MISCELLANEOUS TEXTILE GOODS**2291 Felt Goods, Except Woven Felts and Hats**

Establishments primarily engaged in manufacturing pressed felt, regardless of fiber, by means of heat, moisture, and pressure; and those making punched felt for rugs, cushions, and other products from hair, jute, wool, or other fibers by the needle loom process. Establishments primarily engaged in manufacturing woven wool felts and wool haircloth are classified in Industry 2231, those manufacturing felt hats in Group 235, and those manufacturing needle punch carpeting in Industry 2279.

Acoustic felts, except woven
Automotive felts, except woven
Carpet cushions, felt
Felt goods, except woven felts and hats: wool, hair, jute, or other fiber
Insulating felts, except woven
Ironing board felts, except woven
Lining felts, except woven

Linings, carpet: felt, except woven
Mats, felt: except woven
Pads and padding, felt: except woven
Pipe and boiler covering, felt
Polishing felts, except woven
Pressed wool felts
Punched felts
Trimming felts, except woven

2292 Lace Goods

Establishments primarily engaged in manufacturing lace machine products, and those primarily engaged in dyeing and finishing lace goods. Establishments primarily engaged in manufacturing Schiffli machine embroideries are classified in Industry 2397. Establishments primarily engaged in manufacturing knitted lace and netting are classified in Industry 2258.

Bed sets, lace
Covers, lace: chair, dresser, piano, and table
Curtains and curtain fabrics, lace
Dyeing and finishing lace goods
Edgings, lace
Galloons, lace

Lace goods: curtains, bedspreads, table covers, soundings, and insertions
Laces: Barmen, bobbinet, levers, and Nottingham
Netting made on a lace or net machine

2293 Paddings and Upholstery Filling

Establishments primarily engaged in manufacturing batting, padding, wadding, and filling for upholstery, pillows, quilts and apparel, from curled hair, cotton mill waste, moss, hemp tow, flax tow, kapok, and related materials. Establishments primarily engaged in manufacturing wood excelsior pads and wrappers are classified in Industry 2429.

Apparel filling: cotton mill waste, kapok, and related materials
Batts and batting: cotton mill waste, kapok, and related materials
Hair, curled: for upholstery, pillow, and quilt filling
Padding and wadding, except excelsior

Pads, fiber: henequen, sisal,istle
Pillow filling: curled hair, cotton waste, moss, hemp tow, kapok, etc.
Quilt filling: curled hair, cotton waste, moss, hemp tow, kapok, etc.
Upholstery filling, except excelsior
Wads and wadding, except excelsior

2294 Processed Waste and Recovered Fibers and Flock

Establishments primarily engaged in processing textile mill waste for spinning, padding, batting, or other uses; in recovering textile fibers from clippings and rags; in putting flock from waste, recovered fibers, or new fiber stock; and in manufacturing oakum and twisted jute packing. Establishments primarily engaged in cleaning and sorting wiping rags or waste are classified in Industry 5093.

Carbonized rags
Fibers, textile: recovery from textile mill waste and rags
Flock (recovered textile fibers)
Garnetting of textile waste and rags
Oakum
Packing, twisted jute

Processing of textile mill waste and recovering fibers
Recovering textile fibers from clippings and rags
Wool shoddy
Wool waste processing

Group Industry
No. No.

229 MISCELLANEOUS TEXTILE GOODS—Continued

2295 Coated Fabrics, Not Rubberized

Establishments primarily engaged in manufacturing coated and impregnated textiles, and in the special finishing of textiles, such as varnishing and waxing. Establishments primarily engaged in rubberizing purchased fabrics are classified in Industry 3069, and those primarily engaged in dyeing and finishing textiles in Group 226.

Buckram: varnished, waxed, and im-
pregnated
Cambric: varnished, waxed, and im-
pregnated
Cloth, varnished glass
Coating and impregnating of fabrics,
except rubberizing
Fabrics, coated and impregnated: ex-
cept rubberized
Laminating of fabrics
Leather, artificial
Mats, varnished glass
Metalizing of fabrics
Oilcloth

Pyroxylin coated fabrics
Resin (plastic) coated fabrics
Sealing or insulating tape for pipe,
fiberglass coated with tar or asphalt
Sleeving, textile: saturated
Tape, varnished: plastic, and other
coated (except magnetic)—m/pm
Tubing, textile: varnished
Waterproofing fabrics, except rubber-
izing
Waxing of cloth
Yarns, plastic coated: made from pur-
chased yarns

2296 Tire Cord and Fabric

Establishments primarily engaged in manufacturing cord and fabric for use in reinforcing rubber tires, industrial belting, fuel cells, and similar uses.

Cord for reinforcing rubber tires, in-
dustrial belting, and fuel cells

Fabric for reinforcing rubber tires, in-
dustrial belting, and fuel cells

2297 Nonwoven Fabrics

Establishments primarily engaged in manufacturing nonwoven fabrics (by bonding and/or interlocking of fibers) by mechanical, chemical, thermal or solvent means or by combinations thereof. Establishments primarily engaged in producing fabrics by the wool felting process are classified in other industries in this Major Group.

Bonded-fiber textiles, except felt
Fabrics, bonded fiber: except felt
Nonwoven textiles, except wool

Ribbon, nonwoven (yarn bonded by
plastic)
Spunbonded fabrics

2298 Cordage and Twine

Establishments primarily engaged in manufacturing rope, cable, cordage, twine, and related products from abaca (Manila), sisal, henequen, hemp, cotton, paper, jute, flax man-made fibers including glass, and other fibers.

Binder and baler twine
Blasting mats, rope
Cable, fiber
Camouflage nets, not made in weaving
mills
Cargo nets (cordage)
Cord, braided
Cordage: abaca (Manila), sisal,
henequen, hemp, jute, and other
fibers
Fish nets and seines, made in cordage
or twine mills

Fishing lines, nets, seines: made in
cordage or twine mills
Hard fiber cordage and twine
Insulator pads, cordage
Nets, rope
Rope, except asbestos and wire
Slings, rope
Soft fiber cordage and twine
Trawl twine
Twine
Wire rope centers

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Group Industry
No. No.
229

MISCELLANEOUS TEXTILE GOODS—Continued**2299 Textile Goods, Not Elsewhere Classified**

Establishments primarily engaged in manufacturing linen goods, jute goods except felt, and other textile goods, not elsewhere classified. Establishments primarily engaged in processing textile fibers to prepare them for spinning, such as wool scouring and carbonising and combing and converting tow to top, are also classified here. Establishments primarily engaged in manufacturing woven felts are classified in Industry 2231, nonwoven felts in Industry 2291, nonwoven textiles in Industry 2297 and cordage and twine in Industry 2298.

Bagging, jute: made in jute weaving mills
Burlap, jute
Coir yarns and roving
Crash, linen
Fabrics: linen, jute, hemp, ramie—except felt
Flax yarns and roving
Grease, wool
Hand woven fabrics
Hemp yarn, thread, roving, and textiles
Narrow woven fabrics: linen, jute, hemp, and ramie
Nolls, wool and mohair
Preparing textile fibers for spinning (scouring and combing)
Ramie yarn, thread, roving, and textiles
Rayon tops, combing and converting

Roves, flax and jute
Rugbacking, jute or other fiber: except felt
Slubs and nubs (cutting up fibers for use in tweeds)
Textile mills: linen, jute, hemp, and ramie yarn, thread, and fabric
Tops, combing and converting
Tops, man-made fiber
Tow to top mills
Towels and towelings, linen and linen-and-cotton mixtures: ~~mixes~~
Thread: linen, hemp, and ramie
Webbing, jute
Wool scouring and carbonizing
Wool tops, combing and converting
Yarn: flax, jute, hemp, and ramie
Yarn, metallic, ceramic, or paper fibers
Yarns, specialty and novelty

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Major Group 23.—APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIALS

The Major Group as a Whole

This major group, known as the cutting-up and needle trades, includes establishments producing clothing and fabricating products by cutting and sewing purchased woven or knit textile fabrics and related materials such as leather, rubberized fabrics, plastics and furs.

Included in the apparel industries are three types of establishments: (1) the "regular" or inside factories, (2) contract factories, and (3) apparel jobbers. The regular factories perform all of the usual manufacturing functions within their own plant; the contract factories manufacture apparel from materials owned by others; and apparel jobbers perform the entrepreneurial functions of a manufacturing company, such as buying raw materials, designing and preparing samples, arranging for the manufacture of the garments from their materials and selling of the finished apparel.

Custom tailors and dressmakers not operating on a factory basis are classified in Industry 5699; establishments which purchase and resell finished garments but do not perform the functions of the apparel jobbers are classified in Group 513.

Group No. Industry No.

231 MEN'S, YOUTHS', AND BOYS' SUITS, COATS, AND OVERCOATS

2311 Men's, Youths', and Boys' Shirts (Except Work Shirts) and Nightwear

Establishments primarily engaged in manufacturing men's, youths', and boys' tailored suits, coats, and overcoats. Establishments primarily engaged in manufacturing uniforms (except athletic uniforms) are also included in this industry. Establishments primarily engaged in manufacturing men's work garments are classified in Industry 2328.

Coats: tailored—men's, youths', and boys'
Firemen's uniforms
Formal jackets, men's and youths'
Military uniforms, men's and youths'
Overcoats: men's, youths', and boys'
Policemen's uniforms
Suits: men's, youths', and boys'

Tailored dress and sport coats: men's and boys'
Topcoats: men's, youths', and boys'
Tuxedos
Uniforms, men's: suits, coats, and overcoats
Vests: except suede, leatherette, blanket lined—men's and boys'

232 MEN'S, YOUTHS', AND BOYS' FURNISHINGS, WORK CLOTHING, AND ALLIED GARMENTS

2321 Men's, Youths', and Boys' Shirts (Except Work Shirts) and Nightwear

Establishments primarily engaged in manufacturing men's, youths', and boys' shirts (including polo and sports shirts) and nightwear, cut and sewed from purchased woven or knit fabric. Establishments primarily engaged in manufacturing work shirts are classified in Industry 2328. Knitting mills primarily engaged in manufacturing nightwear are classified in Industry 2254, and outerwear in Industry 2253.

Blouses, boys': *m/psm*
Collars, men's and youths': *m/psm*
Flannel shirts, except work shirts: men's, youths', and boys'
Nightshirts: men's, youths', and boys'—*m/psm*
Nightwear: men's, youths', and boys' (except robes)—*m/psm*
Pajamas: men's, youths', and boys'—*m/psm*
Polo shirts: men's, youths', and boys'—*m/psm*

Shirts, except work shirts: men's and boys'—*m/psm*
Shirts, flannel: except work shirts—men's, youths', and boys'
Sports shirts: men's, youths', and boys'—*m/psm*
T-shirts: men's, youths', and boys'—*m/psm*
Uniform shirts

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Group Industry
No. No.**222 MEN'S, YOUTHS', AND BOYS' FURNISHINGS, WORK CLOTHING, AND ALLIED GARMENTS—Continued****2322 Men's, Youths', and Boys' Underwear**

Establishments primarily engaged in manufacturing men's, youths', and boys' underwear, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing underwear are classified in Industry 2254.

Shorts (underwear): men's, youths',
and boys'—*m/psm*

Underwear: men's, youths', and boys'—
m/psm

2323 Men's, Youths', and Boys' Neckwear

Establishments primarily engaged in manufacturing men's, youths', and boys' neckties, scarfs, and mufflers, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing neckties, scarfs, and mufflers are classified in Industry 2253.

Ascots: men's, youths', and boys'—
m/psm
Bowties
Mufflers: men's, youths', and boys'—
m/psm

Neckties: men's, youths', and boys'—
m/psm
Scarfs: men's, youths', and boys'—
m/psm
Ties, handsewn: *m/psm*

2327 Men's, Youths', and Boys' Separate Trousers

Establishments primarily engaged in manufacturing men's, youths', and boys' separate trousers and slacks. Establishments primarily engaged in manufacturing complete suits are classified in Industry 2311, and work pants and jeans in Industry 2328.

Knickers, dress (separate): men's,
youths', and boys'
Pants, dress (separate): men's,
youths', and boys'
Shorts (outerwear): men's, youths',
and boys'

Slacks, dress (separate): men's,
youths', and boys'—*m/psm*
Trousers, dress (separate): men's,
youths', and boys'

2328 Men's, Youths', and Boys' Work Clothing

Establishments primarily engaged in manufacturing men's, youths', and boys' work shirts, pants, jeans, and other work clothing and washable service apparel.

Coveralls, except waterproof
Dungarees: men's, youths', and boys'
Flannel work shirts: men's, youths',
and boys'
Industrial garments
Jackets, overall and work
Medical uniforms, doctors'
Overall jackets
Overalls

Pants, work
Service apparel, washable: hospital,
professional, barbers', bakers', etc.
Shirts, work: men's, youths', and boys'
Slacks, except dress: men's, youths',
and boys'—*m/psm*
Work garments, waterproof: except
raincoats—oiled fabric

2329 Men's, Youths', and Boys' Clothing, Not Elsewhere Classified

Establishments primarily engaged in manufacturing men's, youths', and boys' clothing, not elsewhere classified. Establishments primarily engaged in manufacturing polo and sport shirts from purchased woven or knit materials are classified in Industry 2321; separate trousers in Industry 2327; work clothing in Industry 2328; and leather and sheep lined garments in Industry 2386. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253.

Athletic clothing: men's, youths', and
boys'
Bathing suits: men's, youths', and
boys'—*m/psm*
Coats: oiled fabric, leatherette, blanket
lined—men's, youths', and boys'
Field jackets, military
Gymnasium clothing: men's, youths',
and boys'
Hunting coats and vests, men's
Jackets, sport: suede, leatherette, mel-
ton, blanket lined—men's and boys'
Lumberjackets: men's, youths', and
boys'

Mackinaws: men's, youths', and boys'
Melton jackets: men's, youths', and
boys'
Pants, athletic and gymnasium: men's,
youths', and boys'
Riding clothes: men's, youths', and
boys'
Shirt and slack suits: men's, youths',
and boys'
Ski pants: men's, youths', and boys'
Ski suits: men's, youths', and boys'
Snow suits: men's, youths', and boys'
Sports clothing, nontailored: men's,
youths', and boys'—*m/psm*

Group Industry
No. No.

232 MEN'S, YOUTHS', AND BOYS' FURNISHINGS, WORK CLOTHING, AND ALLIED GARMENTS—Continued

2329 Men's, Youths', and Boys' Clothing, Not Elsewhere Classified—Continued

Sweaters: men's, youths', and boys'—
m/fpm

Uniforms, athletic and gymnasium:
men's, youths', and boys'

Vests, sport: suede, leatherette, blanket lined—men's and boys'

Wash suits: men's, youths', and boys'

Windbreakers: men's, youths', and boys'

233 WOMEN'S, MISSES' AND JUNIORS' OUTERWEAR

2331 Women's, Misses', and Juniors' Blouses, Waists, and Shirts

Establishments primarily engaged in manufacturing women's, misses', and juniors' blouses, waists, and shirts. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253. Establishments primarily engaged in manufacturing girls', children's, and infants' blouses, waists and shirts are classified in Industry 2361.

Blouses: women's, misses', and juniors'—m/fpm

Shirts: women's, misses', and juniors'—m/fpm

Waists: women's, misses', and juniors'—m/fpm

2335 Women's, Misses', and Juniors' Dresses

Establishments primarily engaged in manufacturing women's, misses', and juniors' dresses, including ensemble dresses and pants dresses, whether sold by the piece or by the dozen. Establishments primarily engaged in manufacturing girls', children's, and infants' dresses are classified in Industry 2361.

Dresses, paper
Dresses: women's, misses', and juniors'—m/fpm

Ensemble dresses: women's, misses', and juniors'—m/fpm

Housedresses—m/fpm

Pants dresses—m/fpm

2337 Women's, Misses', and Juniors' Suits, Skirts, and Coats

Establishments primarily engaged in manufacturing women's, misses', and juniors' suits, pantsuits, skirts, and coats except fur coats and raincoats. These garments are generally tailored and usually lined. Establishments primarily engaged in manufacturing fur garments are classified in Industry 2371, raincoats in Industry 2385, and knitting mills primarily engaged in manufacturing knit outerwear in Industry 2253.

Capes, except fur and vulcanized rubber: women's, misses', and juniors'

Coats, except fur and raincoats: women's, misses', and juniors'

Jackets, except fur: women's, misses', and juniors'

Pantsuits: women's, misses' and juniors'

Skirts, separate: women's, misses', and juniors'—m/fpm

Suits: women's, misses', and juniors'

Uniforms, except athletic: women's, misses', and juniors'

2339 Women's, Misses', and Juniors' Outerwear, Not Elsewhere Classified

Establishments primarily engaged in manufacturing women's, misses', and juniors' outerwear, not elsewhere classified, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253.

Aprons, except rubberized and plastic: women's, misses', and juniors'

Athletic clothing: women's, misses', and juniors'

Bathing suits: women's, misses', and juniors'—m/fpm

Beachwear: women's, misses', and juniors'—m/fpm

Collar and cuff sets, m/fpm

Culottes: women's, misses', and juniors'

Dickies

Hoovers, women's and misses'

Hospital garments, women's

Jackets, not tailored: women's, misses', and juniors'

Knickers: women's, misses', and juniors'

Leotards, m/fpm

Neckwear, women's: m/fpm

Pants outfits, except pantsuits and pants dresses

Play suits: women's, misses', and juniors'

Riding habits: women's, misses', and juniors'

Ruffings, women's

Scarfs, fascinators, hoods, headbands, etc.: women's and juniors'—m/fpm

Shorts: women's, misses', and juniors' (outerwear)—m/fpm

Ski jackets and pants: women's, misses', and juniors'—m/fpm

Ski suits: women's, misses', and juniors'—m/fpm

Slacks: women's, misses', and juniors'—m/fpm

Smocks: women's, misses', and juniors'

Snow suits: women's, misses', and juniors'—m/fpm

Uniforms, athletic: women's, misses', and juniors'

Washable service apparel: nurses', maids', waitresses', etc.

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Group Industry
No. No.**234 WOMEN'S, MISSES', CHILDREN'S, AND INFANTS' UNDERGARMENTS****2341 Women's, Misses', Children's, and Infants' Underwear and Nightwear**

Establishments primarily engaged in manufacturing women's, misses', children's, and infants' underwear and nightwear, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing underwear and nightwear are classified in Industry 2254.

Bedjackets: women's, misses' and juniors—*m/psm*
Negligees: women's, misses', children's, and infants—*m/psm*
Nightwear: women's, misses', children's, and infants—*m/psm*
Pajamas: women's, misses', children's, and infants—*m/psm*

Panties, *m/psm*
Slips: women's, misses', children's and infants—*m/psm*
Step-ins, *m/psm*
Underwear: women's, misses', children's, and infants—*m/psm*

2342 Brassieres, Girdles, and Allied Garments

Establishments primarily engaged in manufacturing brassieres, girdles, corsets, corset accessories, and allied garments. Establishments primarily engaged in manufacturing surgical and orthopedic appliances are classified in Industry 3942.

Brassieres, *m/psm*
Corset accessories: clasps, stays, etc.
Corsets and allied garments, except surgical: *m/psm*

Foundation garments, women's: *m/psm*
Girdles, *m/psm*

235 HATS, CAPS, AND MILLINERY**2351 Millinery**

Establishments primarily engaged in manufacturing women's, misses', children's, and infants' millinery. Establishments primarily engaged in manufacturing millinery braid and trimmings are classified in Industry 2396.

Hats, trimmed: women's, misses', and children's

Millinery

2352 Hats and Caps, Except Millinery

Establishments primarily engaged in manufacturing hats and caps (except millinery) and all hat bodies. Knitting mills primarily engaged in manufacturing caps are classified in Industry 2253.

Baseball caps
Caps, cloth: men's and boys'—*m/psm*
Chauffeurs' hats and caps, cloth
Harvest hats, straw
Hat bodies: fur felt, straw, and wool felt
Hats and caps: except millinery and paper—*m/psm*
Hats: fur felt, straw and wool felt—men's and boys'

Helmets, jungle cloth: wool lined
Opera hats
Panama hats, men's and boys'
Policemen's hats and caps, cloth
Silk hats, except millinery
Uniform hats and caps, cloth: men's, boys', and women's

236 GIRLS', CHILDREN'S, AND INFANTS' OUTERWEAR**2361 Girls', Children's, and Infants' Dresses, Blouses, Waists, and Shirts**

Establishments primarily engaged in manufacturing girls', children's, and infants' dresses, blouses, waists, and shirts, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253.

Blouses: girls', children's and infants—*m/psm*
Dresses: girls', children's, and infants—*m/psm*

"Middles": girls', children's, and infants—*m/psm*
Waists: girls', children's, and infants—*m/psm*

Group Industry
No. No.**236 GIRLS', CHILDREN'S, AND INFANTS' OUTERWEAR—Continued****2363 Girls', Children's, and Infants' Coats and Suits**

Establishments primarily engaged in manufacturing girls', children's, and infants' coats and suits, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253.

Coat and legging sets: girls' and children's, *m/ps*
Coats: girls', children's, and infants'—*m/ps*
Jackets: girls', children's, and infants'—*m/ps*

Pantsuits: girls', children's, and infants'—*m/ps*
Ski suits, girls', and children's: *m/ps*
Snow suits, girls' and children's: *m/ps*
Suits: girls' and children's, *m/ps*

2369 Girls', Children's, and Infants' Outerwear, Not Elsewhere Classified

Establishments primarily engaged in manufacturing girls', children's, and infants' outerwear, not elsewhere classified, cut and sewed from purchased woven or knit fabric. Knitting mills primarily engaged in manufacturing outerwear are classified in Industry 2253.

Bathrobes: girls', children's, and infants'—*m/ps*
Beachwear: girls', children's, and infants'—*m/ps*
Bunting, infants': *m/ps*
Culottes, girls' and children's
Headwear: girls', children's and infants'—*m/ps*
Housecoats: girls', children's and infants'—*m/ps*
Infants' headwear, trimmed and untrimmed
Leggings: girls', children's, and infants'—*m/ps*

Lounging robes, except knit: children's—*m/ps*
Play suits: girls', children's, and infants'—*m/ps*
Rompers, infants': *m/ps*
Shorts, girls' and children's: outerwear—*m/ps*
Skirts: girls', children's and infants'—*m/ps*
Slacks, girls' and children's: *m/ps*
Suits and rompers, children's and infants': *m/ps*
Sun suits: girls', children's, and infants'—*m/ps*

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FUR GOODS**2371 Fur Goods**

Establishments primarily engaged in manufacturing fur coats, and other garments, accessories, and trimmings made of fur. Establishments primarily engaged in manufacturing sheep lined clothing are classified in Industry 2386, and those engaged in dyeing and dressing of furs in Industry 3999.

Caps, fur
Coat linings, fur
Fur apparel: capes, coats, hats, jackets, and neckpieces
Fur finishers and liners for the fur goods trade: buttonhole making, etc.

Fur plates and trimmings
Glasgow furs
Glove linings, fur
Mounting heads on fur neckpieces

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MISCELLANEOUS APPAREL AND ACCESSORIES**2381 Dress and Work Gloves, Except Knit and All-Leather**

Establishments primarily engaged in manufacturing dress, semidress, and work gloves and mittens, cut and sewed from purchased woven or knit fabric, or these materials combined with leather or plastic. Knitting mills primarily engaged in manufacturing gloves and mittens are classified in Industry 2259, establishments primarily engaged in manufacturing leather gloves in Industry 3151, those manufacturing rubber gloves in Industry 3069, and plastic gloves in Industry 3079.

Dyeing gloves, except knit and all-leather: for the trade
Glove linings, except fur

Gloves and mittens: except knit, all-leather, rubber, plastic, and safety
Knit gloves, *m/ps*

2384 Robes and Dressing Gowns

Establishments primarily engaged in manufacturing men's and women's robes and dressing gowns.

Bathrobes, men's and women's: *m/ps*
Dressing gowns, men's and women's
Dusters (apparel)
Housecoats, except children's and infants'—*m/ps*

Lounging garments, except knit: men's and women's
Robes, lounging: except knit—other than children's

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Group Industry
No. No.**238 MISCELLANEOUS APPAREL AND ACCESSORIES—Continued****2385 Raincoats and Other Waterproof Outer Garments**

Establishments primarily engaged in manufacturing raincoats from purchased rubberized fabrics and other waterproof outer garments made from such material as plicofilm and cellophane. Establishments primarily engaged in manufacturing oiled fabric work garments are classified in Industry 2328, and those manufacturing vulcanized rubber garments and garments made from rubberized fabrics produced in the same establishment are classified in Industry 3089.

Aprons, waterproof: except vulcanized rubber—*m/psm*
Bibs, waterproof: *m/psm*
Clothing, waterproof: *m/psm*
Diaper covers, waterproof: except vulcanized rubber
Pants, waterproof: *m/psm*

Plastic gowns
Raincoats, except vulcanized rubber—*m/psm*
Shields, waterproof: except vulcanized rubber—*m/psm*
Waterproof outer garments, except vulcanized rubber and oiled—*m/psm*

2386 Leather and Sheep Lined Clothing

Establishments primarily engaged in manufacturing leather and sheep lined garments. Establishments primarily engaged in manufacturing leather gloves and mittens are classified in Industry 3151, and fur garments in Industry 2371.

Clothing, leather and sheep-lined
Coats, leather and sheep-lined

Garments, leather and sheep-lined
Jackets, leather and sheep-lined

2387 Apparel Belts

Establishments primarily engaged in manufacturing men's and women's apparel belts, regardless of material.

Belts, apparel: made of any material

2389 Apparel and Accessories, Not Elsewhere Classified

Establishments primarily engaged in manufacturing suspenders, garters, handkerchiefs, and other apparel, not elsewhere classified, such as academic caps and gowns, vestments, and theatrical costumes.

Arm bands, elastic
Caps and gowns, academic
Costumes: lodge, masquerade, theatrical, etc.
Cummerbunds
Footlets
Garter belts

Garters
Handkerchiefs, except paper
Hose supporters
Prayer shawls, *m/psm*
Regalia, *m/psm*
Suspenders
Vestments, academic and clerical

239 MISCELLANEOUS FABRICATED TEXTILE PRODUCTS**2391 Curtains and Draperies**

Establishments primarily engaged in manufacturing curtains and draperies from purchased materials. Establishments primarily engaged in manufacturing lace curtains on lace machines are classified in Industry 2292.

Cottage sets (curtains), *m/psm*
Curtains, window: *m/psm*

Draperies, plastic and textile: *m/psm*

2392 Housefurnishings, Except Curtains and Draperies

Establishments primarily engaged in manufacturing housefurnishings, such as blankets, bedspreads, sheets, tablecloths, and towels from purchased materials. Establishments primarily engaged in manufacturing curtains and draperies are classified in Industry 2391. Establishments producing housefurnishings primarily of fabric woven at the same establishment are classified in Industries 2211, 2221, or 2231, according to fiber.

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MISCELLANEOUS FABRICATED TEXTILE PRODUCTS—Continued

2392 Housefurnishings, Except Curtains and Draperies—Continued

Bags, garment storage: made of any material except paper
 Bags, laundry *m/psm*
 Bath mitts (washcloths)
 Bedspreads and bed sets, *m/psm*
 Blanket bags, plastic
 Blankets, *m/psm*
 Boat cushions
 Bridge sets (cloths and napkins)
 Chair covers, cloth
 Chair pads, except felt
 Comforters or comfortables—*m/psm*
 Curtains, shower: *m/psm*
 Cushions, except spring and carpet cushions
 Dishcloths, nonwoven textile
 Dust cloths
 Dusters, fabric
 Dusting cloths, plain
 Hassocks
 Housefurnishings, except curtains and draperies
 Ironing board pads, *m/psm*
 Linings, carpet: textile—except felt
 Lunch cloths, *m/psm*

Mattress pads
 Mattress protectors, except rubber
 Mops, floor and dust
 Napkins, fabric and nonwoven textiles:
 m/fpm
 Pads and padding, table: except asbestos, felt, rattan, reed, and willow
 Pile, wicker, m/fpm
 Pillows, bed: m/fpm
 Polishing cloths, plain
 Quilt, m/fpm
 Scarfs: table, dresser, etc.—m/fpm
 Sheets, fabric: m/fpm
 Sheets, hospital: nonwoven textile
 Shoe bags, m/fpm
 Slip covers: made of fabric, plastic,
 and other material—except paper
 Table mats, leatherette
 Tablecloths, m/fpm
 Tablecloths, plastic
 Towels, fabric and nonwoven textiles:
 m/fpm
 Wardrobe bags, m/fpm
 Washcloths, m/fpm

2390 Textile Bags

Establishments primarily engaged in manufacturing shipping and other industrial bags from purchased fabric. Establishments primarily engaged in manufacturing plastic bags are classified in Industry 2643; laundry, wardrobe, shoe and other textile housefurnishing bags in Industry 2392; and luggage in Industry 3161.

Bags and containers, textile except sleeping bags: insulated or not—
m/s/m
Bags, textile including canvas: except laundry, garment and sleeping—
m/s/m

Duffel bags, canvas
Flour bags, fabric: m/pm
Knapsacks, canvas
Tea bags, fabric: m/pm

2394 Canvas and Related Products

Establishments primarily engaged in manufacturing awnings, tents, and related products from purchased fabric. Establishments primarily engaged in manufacturing canvas bags are classified in Industry 2393.

Air cushions, canvas
Awning stripes, painted : m/fpm
Awnings, fabric : m/fpm
Canopies, fabric : m/fpm
Canvas products, except bags and knap-
sacks : m/fpm

Cloths, drop : fabric—m/psm
Covers, fabric : m/psm
Balls, m/psm
Shades, canvas
Tarpaulins, fabric : m/psm
Tents, m/psm

2395 **Pleating, Decorative and Novelty Stitching, and Tucking for the Trade**

Establishments primarily engaged in pleating, decorative and novelty stitching, and tucking for the trade. Establishments primarily engaged in performing similar services for individuals are classified in service industries. Establishments primarily engaged in manufacturing trimmings are classified in Industry 2396.

Appliqueing, for the trade
**Art goods for embroidering, stamped :
 m/psm**
Art needlework, m/psm
**Buttonhole making, except fur : for the
 trade**
Crochet ware, machine-made
Emblems, embroidered
**Embroideries : metallic, beaded,
 sequined**
**Embroidery products, except Schiffli
 machine**
Eyelet making, for the trade
Hemstitching, for the trade

Lace, burnt-out
Looping, for the trade
Permanent pleating and pressing, for
the trade
Pleating, for the trade
Quilted fabrics or cloth
Quilting, for the trade
Ruffling, for the trade
Scalloping, for the trade
Stitching, decorative and novelty : for
the trade
Swiss loom embroideries
Tucking, for the trade

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Group Industry
No. No.**239 MISCELLANEOUS FABRICATED TEXTILE PRODUCTS—Continued****2396 Automotive Trimmings, Apparel Findings, and Related Products**

Establishments primarily engaged in manufacturing automotive trimmings and apparel findings and related products.

Apparel findings and trimmings, *m/pcm*
 Bindings, bias: *m/pcm*
 Bindings, cap and hat: *m/pcm*
 Collar linings, for men's coats
 Findings, suit and coat: coat fronts, pockets, etc.—men's and boys'
 Hat findings, men's
 Hatters' fur
 Linings, handbag or pocketbook
 Linings, hat: men's
 Linings, luggage
 Linings: suit, coat, shirt, skirt, dress, necktie, millinery, etc.
 Luggage linings
 Millinery braids and trimmings, *m/pcm*
 Pads, shoulder: for coats, suits, etc.—men's and women's

Passementeries, *m/pcm*
 Printing and embossing on plastics fabric articles
 Printing on fabric articles
 Ribbons and bows, cut and sewed
 Straps, shoulder: for women's underwear—*m/pcm*
 Sweat bands, hat and cap
 Tip printing and stamping on fabric
 Trimmings, fabric: auto, furniture, millinery, dress, coat, and suit—*m/pcm*
 Trimmings, hat: men's
 Vells and velling, except hair
 Visors, cap
 Waistbands, trouser

2397 Schiffli Machine Embroideries

Establishments primarily engaged in manufacturing Schiffli machine embroideries.

Embroideries, Schiffli machine

2399 Fabricated Textile Products, Not Elsewhere Classified

Establishments primarily engaged in manufacturing fabricated textile products, not elsewhere classified.

Aprons, breast (harness)
 Badges, made from fabric
 Bags, sleeping
 Bandoleers
 Banners, made from fabric
 Belting, fabric: *m/pcm*
 Belts, money: made of any material
 Blankets, horse: *m/pcm*
 Cheese bandages, *m/pcm*
 Covers, automobile tire and seat: *m/pcm*
 Diapers, except disposable: *m/pcm*
 Emblems, made from fabric
 Fishing nets, *m/pcm*
 Flags, fabric
 Glove mending on factory basis
 Hammocks, fabric: *m/pcm*

Hand crocheted ware
 Hand woven apparel
 Hats, hand crocheted
 Insignia, military: textile
 Nets, launderers' and dyers'
 Parachutes
 Pennants
 Powder puffs and mitts
 Saddle cloths
 Safety strap assemblies, automobile: except leather
 Seat belts, automobile and aircraft: except leather
 Strap assemblies, tie down: aircraft—except leather
 Welts, *m/pcm*

The Major Group as a Whole

This major group includes logging camps engaged in cutting timber and pulpwood; merchant sawmills, lath mills, shingle mills, cooperage stock mills, planing mills, and plywood mills and veneer mills engaged in producing lumber and wood basic materials; and establishments engaged in manufacturing finished articles made entirely or mainly of wood or wood substitutes. Certain types of establishments producing wood products are classified elsewhere. For example, furniture and office and store fixtures are classified in Major Group 25; musical instruments, toys, and playground equipment, and caskets in Major Group 39. Woodworking in connection with construction, in the nature of reconditioning and repair, or performed to individual order, is classified in non-manufacturing industries.

Group No.	Industry No.
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241 LOGGING CAMPS AND LOGGING CONTRACTORS

2411 Logging Camps and Logging Contractors

Logging camps and logging contractors primarily engaged in cutting timber and in producing rough, round, hewn, or riven primary forest or wood raw materials. Independent contractors engaged in estimating or trucking timber, but who perform no cutting operations, are classified in nonmanufacturing industries. Logging and woods operations conducted in combination with sawmills, pulp mills, or other converting establishments, and not separately reported, are classified in their respective industry groups; namely, with sawmills in Group 242, veneer and plywood mills in Group 243, pulp mills in Major Group 26, and charcoal and wood distillation plants in Group 286. Establishments primarily engaged in the collection of bark, sap, gum, and other forest byproducts are classified in Major Group 08.

- Bolts, wood : handle, heading, shingle, stove, etc.
- Booming timber
- Buris, wood
- Croches, wood
- Driving timber
- Excelsior stock, hewn
- Last blocks, wood : hewn or riven
- Logging camps and logging contractors, not operating sawmills
- Logs
- Mine timbers, hewn
- Peeler logs
- Pickets and paling : round or split
- Piling, wood : untreated
- Pole cutting contractors

Poles, wood: untreated
Posts, wood: hewn, round or split
Pulpwood camps
Pulpwood contractors engaged in cutting, not operating pulp mills
Rails, fence: round or split
Saw logs
Skidding logs
"Stumping" for turpentine or powder manufacturing
Stumps
Ties, railroad: hewn
Timber (product of logging camps)
Veneer logs
Wheelstock, hewn

242 SAWMILLS AND PLANING MILLS

2421 Sawmills and Planing Mills, General

Establishments primarily engaged in sawing rough lumber and timber from logs and bolts, or resawing cants and flitches into lumber, including box lumber and softwood cut stock; planing mills combined with sawmills; and separately operated planing mills which are engaged primarily in producing surfaced lumber and standard workings or patterns of lumber. This industry includes establishments primarily engaged in sawing lath and railroad ties, and in producing tobacco hogshead stock, wood chips, and snow fence lath. Establishments primarily engaged in manufacturing box shooks or boxes are classified in Group 244; sash, doors, wood molding, window and door frames, and other fabricated millwork in Group 243; and hardwood dimension and flooring in Industry 2428. Logging camps combined with sawmills, when not separately reported, are included in this industry.

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Group Industry
No. No.**242 SAWMILLS AND PLANING MILLS—Continued****2421 Sawmills and Planing Mills, General—Continued**

Cants, resawed (lumber)
 Ceiling lumber, dressed
 Chipper mills
 Custom sawmills
 Cut stock, softwood
 Flitches (veneer stock), made in saw-
 mills
 Flooring (dressed lumber), softwood
 Fuelwood, from mill waste
 Kiln drying of lumber
 Lath, made in sawmills and bathmills
 Logging camps combined with sawmills
 Lumber, kiln drying of
 Lumber: rough, sawed, or planed
 Lumber stacking or sticking

Planing mills, independent: except
 millwork
 Planing mills, operated in conjunction
 with sawmills
 Resawing lumber into smaller dimen-
 sions
 Sawdust and shavings
 Sawmills, except special product mills
 Siding (dressed lumber)
 Silo stock, wood: sawed
 Snow fence lath
 Ties, railroad: sawed
 Tobacco hoghead stock
 Wood chips manufacturing

2426 Hardwood Dimension and Flooring Mills

Establishments primarily engaged in manufacturing hardwood dimension lumber and workings therefrom; and other hardwood dimension, semifabricated or ready for assembly; hardwood flooring; and wood frames for household furniture. Establishments primarily engaged in manufacturing stairwork, molding, and trim are classified in Industry 2431; and those manufacturing textile machinery bobbins, picker sticks, and shuttles in Industry 3552.

Blanks, wood: for bowling pins,
 handles, and textile mach. acces-
 sories
 Blocks, wood: for bowling pins,
 handles, and textile mach. acces-
 sories
 Bobbin blocks and blanks, wood
 Brush blocks, wood: turned and shaped
 Carvings, furniture: wood
 Chair frames for upholstered furniture.
 wood
 Chair seats, hardwood
 Dimension, hardwood
 Flooring, hardwood
 Frames for upholstered furniture.
 wood
 Furniture dimension stock, hardwood

Furniture squares, hardwood
 Furniture turnings and carvings, wood
 Gun stocks, wood
 Handle blanks, wood
 Handle stock, sawed or planed
 Lumber, hardwood dimension
 Parquet flooring, hardwood
 Picker stick blanks
 Rungs or rungs, ladder and furni-
 ture: hardwood
 Shuttle blocks: hardwood
 Spool blocks and blanks, wood
 Stock, chair: hardwood—turned,
 shaped, or carved
 Table slides, for extension tables: wood
 Turnings, furniture: wood
 Vehicle stock, hardwood

2429 Special Product Sawmills, Not Elsewhere Classified

Mills primarily engaged in manufacturing excelsior, wood shingles, and cooperage stock; and in sawing special products, not elsewhere classified.

Barrel heading and staves, sawed or
 split
 Cooperage stock mills
 Cooperage stock: staves, heading, and
 hoops—sawed or split
 Excelsior, including pads and wrap-
 pers: wood
 Hoops, wood: for tight or slack cooper-
 age—sawed or split

Sawmills, special product: except lum-
 ber and veneer mills
 Shakes (hand split shingles)
 Shingle mills
 Shingles, wood: sawed or hand split
 Wood wool (excelsior)
 Wrappers, excelsior

243**MILLWORK, VENEER, PLYWOOD, AND STRUCTURAL WOOD MEMBERS****2431 Millwork**

Establishments primarily engaged in manufacturing fabricated millwork. Planing mills primarily engaged in producing millwork are included in this industry, but planing mills primarily producing standard workings or patterns of lumber are clas-
 sified in Industry 2421. Establishments primarily manufacturing wood kitchen cabi-
 nets and bathroom vanities are classified in Industry 2434.

STANDARD INDUSTRIAL CLASSIFICATION

Group No.	Industry No.
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243 **MILLWORK, VENEER, PLYWOOD, AND STRUCTURAL WOOD MEMBERS—Con.**

2431 Millwork—Continued

Awnings, wood
Blinds (shutters), wood
Brackets, wood
Door shutters, wood
Door trim, wood
Doors, combination screen-storm: wood
Dormers, wood
Floor baseboards, wood
Garage doors, overhead: wood
Jalousies, glass: wood frame
Louver windows and doors, glass with
wood frame
Millwork products
Moldings, wood: unfinished and pre-
finished
Newel posts, wood
Ornamental woodwork: cornices, man-
tels, etc.
Panel work, wood
Planing mills, millwork

Porch work, wood
Railings, stair: wood
Sash, door and window: wood
Screens, door and window: wood
Shutters, door and window: wood
Silo staves, wood
Stair railings, wood
Staircases and stairs, wood
Trellises, wood
Trim, wood
Venetian blind slats, wood
Wainscots, wood
Weather strip, wood
Window frames and sash, wood
Window screens, wood
Window trim, wood
Woodwork, interior and ornamental:
windows, doors, sash, mantels, etc.

2434 Wood Kitchen Cabinets

Establishments primarily engaged in manufacturing wood kitchen cabinets and wood bathroom vanities.

Cabinets, to be built-in: wood
Kitchen cabinets, wood: factory made

Vanities, bathroom and other

2435 Hardwood Veneer and Plywood

Establishments primarily engaged in producing commercial hardwood veneer, either face or technical, and those primarily engaged in manufacturing commercial plywood, or prefinished hardwood plywood. This includes nonwood backed or faced veneer and nonwood faced plywood, from veneer produced in the same establishment or from purchased veneer. Establishments primarily engaged in the production of veneer which is used in the same establishment for the manufacture of end products such as fruit and vegetable baskets and wood boxes are classified in Industries 2441 and 2449.

Panels, hardwood plywood
Plywood, hardwood or hardwood faced
Prefinished hardwood plywood

Veneer mills, hardwood
Veneer stock, hardwood

2436 Softwood Veneer and Plywood

Establishments primarily engaged in producing commercial softwood veneer and plywood, from veneer produced in the same establishment or from purchased veneer. Establishments primarily engaged in producing commercial hardwood veneer and plywood are classified in Industry 2435. Establishments primarily engaged in the production of veneer which is used in the same establishment for the manufacture of end products such as fruit and vegetable baskets and wood boxes are classified in Industries 2441 and 2449.

Panels, softwood plywood
Plywood, softwood

Veneer mills, softwood
Veneer stock, softwood

2489 Structural Wood Members, Not Elsewhere Classified

Establishments primarily engaged in producing laminated or fabricated trusses, arches, and other structural members of lumber. Establishments primarily engaged in fabrication on the site of construction are classified in Division C, Construction. Establishments primarily engaged in producing prefabricated wooden buildings, sections, and panels are classified in Industry 2452.

Structural members, laminated wood:
arches, trusses, timbers, etc.

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Group Industry
No. No.

244 WOOD CONTAINERS**2441 Nailed and Lock Corner Wood Boxes and Shook**

Establishments primarily engaged in manufacturing nailed and lock corner wood boxes (lumber or plywood), and which also may produce shook for nailed and lock corner boxes.

Ammunition boxes, wood
Box cleats, wood
Boxes, wood: plain or fabric covered,
nailed or lock corner
Carrier trays, wood
Chests for tools, etc.: wood
Cigar boxes, wood and part wood
Egg cases, wood

Flats, wood: greenhouse
Packing cases, wood: nailed or lock
corner
Shipping cases, wood: nailed or lock
corner
Shook, box
Trunk slats, wood

2448 Wood Pallets and Skids

Establishments primarily engaged in manufacturing wood and wood-metal combination pallets and skids.

Cargo container and pallet combination,
wood or wood and metal combination
Pallet containers, wood or wood and
metal combination

Pallets and skids, wood or wood and
metal combination
Skids and pallets, wood or wood and
metal combination

2449 Wood Containers, Not Elsewhere Classified

Establishments primarily engaged in manufacturing wood containers, not elsewhere classified, such as cooperage, wirebound boxes and crates, and other veneer and plywood containers. Establishments primarily engaged in manufacturing tobacco hogshead stock are classified in Industry 2421, and those manufacturing cooperage stock in Industry 2429.

Barrels, wood: coopered
Baskets, fruit and vegetable: till, berry,
climax, round stave, etc.
Berry cups, veneer and splint
Boxes, wood: wirebound
Buckets, wood: coopered
Casks, wood: coopered
Chicken coops (crates), wood: wire-
bound for shipping poultry
Climax baskets
Containers except boxes, veneer and
plywood
Containers made of staves
Cooperage
Crates: berry, butter, fruit, and vegetable—wood, wirebound
Drums, plywood
Drums, shipping: wood—wirebound
Firkins and kits, wood: coopered

Fruit baskets, veneer and splint
Hampers, fruit and vegetable: veneer
and splint
Hogsheads, wood: coopered
Kegs, wood: coopered
Kits, wood: coopered
Market baskets, fruit and vegetable:
veneer and splint
Pails, plywood
Pails, wood: coopered
Splint baskets, for fruits and vegetables
Tanks, wood: coopered
Tierces (cooperage)
Till baskets, veneer and splint
Tobacco hogsheads
Tubs, wood: coopered
Vats, wood: coopered
Vegetable baskets, veneer and splint

245 WOOD BUILDINGS AND MOBILE HOMES**2451 Mobile Homes**

Establishments primarily engaged in manufacturing mobile homes. These mobile homes are generally over 35 feet long, at least 8 feet wide, do not have facilities for storage of water or waste, and are equipped with wheels. These products may also have nonresidential uses, such as classrooms or offices. Trailers that are generally 35 feet long or less, 8 feet wide or less and with self-contained facilities are classified in Industry 3792. Portable buildings not equipped with wheels are classified in Industry 2452.

Mobile buildings for commercial use
(offices, banks, etc.)
Mobile classrooms

Mobile dwellings
Mobile homes, except recreational

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

245 WOOD BUILDINGS AND MOBILE HOMES—Continued

2452 Prefabricated Wood Buildings and Components

Establishments primarily engaged in manufacturing prefabricated wood buildings, sections, and panels. Establishments primarily engaged in fabricating buildings on the site of construction are classified in Division C, Construction.

Buildings, prefabricated and portable:
wood
Chicken coops, prefabricated: for housing poultry
Corn cribs, prefabricated: wood
Farm buildings, prefabricated or portable: wood

Houses, portable: prefabricated wood
Marinas, prefabricated: wood
Panels for prefabricated wood buildings
Sauna rooms, prefabricated: wood
Sections for prefabricated wood buildings

249 MISCELLANEOUS WOOD PRODUCTS

2491 Wood Preserving

Establishments primarily engaged in treating wood, sawed or planed in other establishments, with creosote or other preservatives to prevent decay and to protect against fire and insects. This industry also includes the cutting, treating, and selling of poles, posts, and piling, but establishments primarily engaged in manufacturing other wood products, which they may also treat with preservatives, are not included.

Bridges and trestles, wood: treated
Creosoting of wood
Cross-ties, treated
Flooring, wood block: treated
Millwork, treated
Mine props, treated
Piles, foundation and marine construction: treated
Piling, wood: treated

Poles and pole crossarms, treated
Poles, cutting and preserving
Posts, wood: treated
Preserving of wood (creosoting)
Railroad cross bridge and switch ties, treated
Structural lumber and timber, treated
Vehicle lumber, treated
Wood products, creosoted

2492 Particleboard

Establishments primarily engaged in manufacturing wood panel products from small wood particles. This includes preparation of small particles of wood, drying, mixing with a synthetic resin binder, and compressing. Pressing may take place in hydraulic presses with heated platens or by extrusion.

Particleboard

2499 Wood Products, Not Elsewhere Classified

Establishments primarily engaged in turning and shaping wood, and manufacturing miscellaneous wood products, not elsewhere classified, from rattan, reed, splint, straw, veneer, veneer strips, wicker, and willow. This industry also includes establishments manufacturing lasts and related products, cork products, hardboard, and wood or metal mirror and picture frames. Establishments primarily engaged in manufacturing particleboard are classified in Industry 2492, and those manufacturing pallets and skids in Industry 2448.

Applicators, wood
Bakers' equipment, wood
Baskets, except fruit, vegetable, fish and bait: rattan, reed, straw, etc.
Battery separators, wood
Bearings, wood
Beekeeping supplies, wood
Bentwood (steam bent) products, except furniture
Blocks, tackle: wood
Blocks, tailors' pressing: wood
Board, bagasse
Boards, bulletin: wood and cork
Boards: clip, ironing, meat, and pastry—wood
Boot and shoe lasts, regardless of material
Bowls, wood: turned and shaped
Briquettes, sawdust or bagasse: non-petroleum binder

Bungs, wood
Buoys, cork
Bushings, wood
Cane, chair: woven of reed or rattan
Carpets, cork
Cloth winding reels, wood
Clothes driers (clothes horses), wood
Clothes drying frames, wood
Clothespins, wood
Clubs, policemen's: wood
Cooling towers, wood or wood and sheet metal combination
Cork products
Corks, bottle
Covers, bottle and demijohn: willow, rattan, and reed
Curtain stretchers, wood
Dishes, wood
Display forms for boots and shoes, regardless of material

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Group Industry
No. No.
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MISCELLANEOUS WOOD PRODUCTS—Continued

2499 Wood Products, Not Elsewhere Classified—Continued

Dowels, wood
Extension planks, wood
Fancets, wood
Fellies, wood
Fencing, wood except rough pickets,
poles and rails
Flour, wood
Frames: medallion, mirror, photo-
graph, and picture—wood or metal
Framing pictures and mirrors for the
trade
Furniture inlays (veneers)
Garment hangers, wood
Gavels, wood
Grain measures, wood: turned and
shaped
Hammers, meat: wood
Hampers, laundry: rattan, reed, splint,
veneer, and willow
Handles, wood: turned and shaped
Hardboard, tempered or untempered
Hubs, wood
Insulating materials, cork
Jacks, ladder: wood
Knobs, wood
Ladders, wood
Last sole patterns, regardless of ma-
terial
Letters, wood
Life preservers, cork
Mallets, wood
Marbleboard (stone-face hard board)
Market baskets, except fruit and vege-
table: veneer and splint
Marquetry, wood
Mashers, potato: wood
Masts, wood
Mauls, wood
Moldings, picture frame: finished
Mulch, wood and bark
Novelties, wood fiber
Oars, wood
Pads, table: rattan, reed, and willow
Paint sticks, wood
Pencil slats
Plugs, wood
Poles: clothesline, tent, flag, etc.

Pressed logs of sawdust and other
wood particles, nonpetroleum binder
Pulleys, wood
Racks, for drying clothes: wood
Rattan ware, except furniture
Reed ware, except furniture
Reels, cloth winding: wood
Reels, for drying clothes: wood
Reels, plywood
Rollers, wood
Rolling pins, wood
Rules and rulers, wood
Saddle trees, wood
Sawdust, reground
Scaffolds, wood
Scoops, wood
Seat covers, rattan
Seats, toilet: regardless of material
Shoe stretchers, regardless of material
Shoe trees, regardless of material
Signboards, wood
Skewers, wood
Snow fence
Spars, wood
Spigots, wood
Spokes, wood
Spools except for textile machinery,
wood
Stakes, surveyors': wood
Stepladders, wood
Stoppers, cork
Tile, cork
Tool handles, wood: turned and shaped
Toothpicks, wood
Trays: wood, wicker, and bagasse
Trophy bases, wood
Vats, wood: except coopered
Washboards, wood and part wood
Webbing: cane, reed, and rattan
Willow ware, except furniture
Wood, except furniture: turned and
carved
Wood flour
Woodenware, kitchen and household
Yard sticks, wood

Major Group 25.—FURNITURE AND FIXTURES*The Major Group as a Whole*

This major group includes establishments engaged in manufacturing household, office, public building, and restaurant furniture; and office and store fixtures. Establishments primarily engaged in the production of millwork are classified in Industry 2481; wood kitchen cabinets in Industry 2484; cut stone and concrete furniture in Major Group 32; laboratory and hospital furniture in Major Group 38; beauty and barber shop furniture in Major Group 39; and woodworking to individual order or in the nature of reconditioning and repair in nonmanufacturing industries.

Group No. Industry No.

251 HOUSEHOLD FURNITURE**2511 Wood Household Furniture, Except Upholstered**

Establishments primarily engaged in manufacturing wood household furniture commonly used in dwellings. This industry also includes establishments manufacturing camp furniture. Establishments primarily engaged in manufacturing upholstered furniture are classified in Industry 2512, and reed and rattan furniture in Industry 2519; television, radio, phonograph, and sewing machine cabinets in Industry 2517; and kitchen cabinets and bathroom vanities in Industry 2484.

Beds, including folding and cabinet beds: household—wood
Bookcases, household: wood
Breakfast sets (furniture), wood
Bridge sets (furniture), wood
Buffets (furniture)
Cedar chests
Chairs, bentwood
Chairs, except upholstered, household: wood
Chests, silverware: wood (floor standing)
Chiffoniers and chifforobes
China closets
Coffee tables, wood
Commodore
Console tables, wood
Cots, household: wood
Cradles, wood
Cribs, wood
Desks, household: wood
Dining room furniture, wood
Dressers
Dressing tables
End tables, wood

Frames for box springs or bedsprings, wood
Furniture: household, club room, lawn, novelty—wood, not upholstered
Garden furniture, wood
Headboards, wood
High chairs, children's: wood
Juvenile furniture, wood: except upholstered
Magazine racks, wood
Nursery furniture, wood
Play pens, children's: wood
Rockers, wood: except upholstered
Screens, privacy: wood
Secretaries, household: wood
Stands: telephone, bedside, smoking, etc.—wood
Stools, household: wood
Storage chests, household: wood
Swings, porch: wood
Tables, household: wood
Tea wagons, wood
Vanity dressers
Wardrobes, household: wood
Whatnot shelves, wood

2512 Wood Household Furniture, Upholstered

Establishments primarily engaged in manufacturing upholstered furniture on wood frames. Shops primarily engaged in reupholstering furniture, or upholstering frames to individual order, are classified in nonmanufacturing industries. Establishments primarily engaged in manufacturing dual purpose sleep furniture, such as studio couches, sofa beds, and chair beds, are classified in Industry 2515, regardless of the material used in the frame. Establishments primarily engaged in manufacturing wood frames for upholstered furniture are classified in Industry 2426.

Chairs, overstuffed or upholstered on wood frames
Couches, upholstered on wood frames
Davenport, upholstered on wood frames
Furniture, household: upholstered on wood frames

Juvenile furniture, upholstered on wood frames
Living room furniture, upholstered on wood frames
Rockers, upholstered on wood frames
Sofas, upholstered on wood frames

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Group Industry
No. No.**251 HOUSEHOLD FURNITURE—Continued****2514 Metal Household Furniture**

Establishments primarily engaged in manufacturing padded or plain metal household furniture of a type commonly used in dwellings. Establishments primarily engaged in manufacturing dual purpose sleep furniture, such as studio couches, sofa beds, and chair beds, are classified in Industry 2515, regardless of the material used in the frame.

Backs for metal household furniture
Beds, including folding and cabinet
beds: household—metal
Bookcases, household: metal
Breakfast sets (furniture), metal
Bridge sets (furniture), metal
Cabinets, kitchen: metal
Cabinets, medicine: metal
Cabinets, radio and television: metal
Camp furniture, metal
Cots, household: metal
Cribs, metal
Dinette sets, metal
Frames for box springs or bedsprings,
metal
Furniture, club room: metal—padded
or plain
Garden furniture, metal
Gliders (furniture), metal: padded or
plain

Hammocks, metal or fabric and metal
combination
Household furniture, metal: padded or
plain
Household furniture upholstered on
metal frames
Juvenile furniture: metal
Lawn furniture, metal
Novelty furniture, metal
Nursery furniture, metal
Seats for metal household furniture
Smoking stands, metal
Stools, household: metal—padded or
plain
Swings, porch: metal
Tables, household: metal
Tea wagons, metal

2515 Mattresses and Bedsprings

Establishments primarily engaged in manufacturing innerspring mattresses, box spring mattresses and noninnerspring mattresses containing felt, foam rubber, urethane, hair, or any other filling material; and assembled wire springs (fabric, coil, or box) for use on beds, couches, and cots. This industry also includes establishments primarily engaged in manufacturing dual purpose sleep furniture, such as studio couches, sofa beds, and chair beds, regardless of the material used in the frame. Establishments primarily engaged in manufacturing automobile seats and backs are classified in Industry 2531; individual wire springs in Industry 3495; and padding and upholstery filling in Industry 2293.

Beds, sofa and chair: on frames of any
material
Bedsprings, assembled
Box springs, assembled
Chair and couch springs, assembled
Cot springs, assembled
Cushion springs, assembled
Cushions, spring

Mattresses, containing felt, foam rubber,
urethane, etc.
Mattresses: innerspring, box spring,
and noninnerspring
Spring cushions
Studio couches, on frames of any material

2517 Wood Television, Radio, Phonograph, and Sewing Machine Cabinets

Establishments primarily engaged in manufacturing wood cabinets for radios, television sets, phonographs, and sewing machines.

Phonograph cabinets and cases, wood
Radio cabinets and cases, wood
Sewing machine cabinets and cases,
wood

Stereo cabinets, wood
Television cabinets, wood

2519 Household Furniture, Not Elsewhere Classified

Establishments primarily engaged in manufacturing reed, rattan and other wicker furniture, plastics and fiberglass household furniture and cabinets, and household furniture, not elsewhere classified.

Bassinets, reed and rattan
Cabinets, radio and television: plastic
Camp furniture, reed and rattan
Chairs, cane
Furniture, household: glass, fiberglass
and plastics
Furniture, household: rattan, reed,
malacca, fiber, willow and wicker
Garden furniture: except wood, metal,
stone, and concrete
Household furniture: rattan, reed,
malacca, fiber, willow, and wicker

Juvenile furniture, rattan and reed:
padded or plain
Lawn furniture: except wood, metal,
stone, and concrete
Malacca furniture, padded or plain
Rattan furniture, padded or plain
Reed furniture, padded or plain
Wicker furniture, padded or plain
Willow furniture, padded or plain

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**252 OFFICE FURNITURE****2521 Wood Office Furniture**

Establishments primarily engaged in manufacturing wood office furniture, whether padded, upholstered or plain.

Benches, office: wood
Bookcases, office: wood
Cabinets, office: wood
Chairs, office: wood—padded, upholstered, or plain
Desks, office: wood

Filing boxes, cabinets, and cases: wood
Furniture, office: wood—padded, upholstered, or plain
Stools, office: wood
Tables, office: wood

2522 Metal Office Furniture

Establishments primarily engaged in manufacturing metal office furniture, whether padded or plain. Establishments primarily engaged in manufacturing safes and vaults are classified in Industry 3499.

Benches, office: metal
Bookcases, office: metal
Cabinets, office: metal
Chairs, office: metal—padded or plain
Desks, office: metal
File drawer frames, metal

Filing boxes, cabinets, and cases: metal
Furniture, office: metal—padded or plain
Stools, office: rotating—metal
Tables, office: metal
Wall cases, office: metal

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PUBLIC BUILDING AND RELATED FURNITURE**2531 Public Building and Related Furniture**

Establishments primarily engaged in manufacturing furniture for schools, theaters, assembly halls, churches, and libraries. Establishments primarily engaged in manufacturing seats for public conveyances, as well as seats for automobiles and aircraft, are included in this industry. Establishments primarily engaged in manufacturing stone furniture are classified in Industry 3281, and concrete furniture in Industry 3272.

Benches for public buildings
Blackboards, wood
Bleacher seating, portable
Chairs, portable folding: wood or metal
Church furniture, except stone or concrete

Furniture: church, library, school, theater, and other public buildings
Pews, church
Seats: automobile, aircraft, railroad and other public conveyances

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PARTITIONS, SHELVING, LOCKERS, AND OFFICE AND STORE FIXTURES**2541 Wood Partitions, Shelving, Lockers, and Office and Store Fixtures**

Establishments primarily engaged in manufacturing wood shelving, lockers, office and store fixtures, prefabricated partitions, plastic laminated fixture tops, and related fabricated products. Establishments primarily engaged in manufacturing refrigerated cabinets, show cases, and display cases are classified in Industry 3585, and safes and vaults in Industry 3499.

Bar fixtures, wood
Booths, telephone: wood
Butchers' store fixtures, wood
Cabinets, show, display, and storage: except refrigerated—wood
Costumers, office and store: wood
Counters and counter display cases, except refrigerated: wood
Display cases and fixtures, except refrigerated: wood
Drainboards, plastic laminated
Fixture tops, plastic laminated
Fixtures, display: office and store—wood
Garment racks, wood

Lockers, except refrigerated: wood
Lunchroom fixtures, wood
Partitions, prefabricated: wood
Pedestals, statuary: wood
Plastic laminate over particleboard (fixture tops)
Racks, merchandise display: wood
Shelving, office and store: wood
Showcases, except refrigerated: wood
Sink tops, plastic laminated
Store fronts, prefabricated: wood
Table or counter tops, plastic laminated
Window backs, store and lunchroom: prefabricated—wood

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Group Industry
No. No.**254 PARTITIONS, SHELVING, LOCKERS, AND OFFICE AND STORE FIXTURES—**
Continued**2542 Metal Partitions, Shelving, Lockers, and Office and Store Fixtures**

Establishments primarily engaged in manufacturing metal shelving, storage racks, lockers, office and store fixtures, prefabricated partitions, and related fabricated products. Establishments primarily engaged in manufacturing refrigerated cabinets, show cases, and display cases are classified in Industry 3585, and safes and vaults in Industry 3499.

Bar fixtures, metal
Booths, telephone: metal
Butchers' store fixtures, metal
Cabinets, show, display, and storage:
except refrigerated—metal
Carrier cases and tables, mail: metal
Costumers, office and store: metal
Counters and counter display cases, ex-
cept refrigerated: metal
Display cases and fixtures, except re-
frigerated: metal
Fixtures, display: office and store—
metal
Garment racks, metal

Lockers, except refrigerated: metal
Lunchroom fixtures, metal
Mail pouch racks, metal
Mailing racks, postal service: metal
Pallet racks, metal
Partitions, prefabricated: sheet metal
Postal service lock boxes
Racks, merchandise display and stor-
age: metal
Shelving angles and slotted bars, metal
Shelving, office and store: metal
Showcases, except refrigerated: metal
Sorting racks, mail: metal
Stands, merchandise display: metal

259 MISCELLANEOUS FURNITURE AND FIXTURES**2591 Drapery Hardware and Window Blinds and Shades**

Establishments primarily engaged in manufacturing curtain and drapery rods, poles, and fixtures; and venetian blinds and other window blinds and shades, regardless of the materials used, except canvas shades and awnings (Industry 2394).

Blinds, venetian
Blinds, vertical
Curtain rods, poles, and fixtures
Drapery rods, poles, and fixtures

Porch shades, wood slat
Shade pulls, window
Shades, window
Window shade rollers and fittings

2599 Furniture and Fixtures, Not Elsewhere Classified

Establishments primarily engaged in manufacturing furniture and fixtures, not elsewhere classified, including furniture specially designed for use in restaurants, bars, cafeterias, bowling establishments, and ships.

Bar furniture
Beds, hospital
Bowling establishment furniture
Cafeteria furniture
Carts, restaurant equipment
Dish carts, restaurant equipment
Factory furniture: stools, work
benches, tool stands, and cabinets
Food trucks, restaurant equipment

Food wagons, restaurant
Furniture, restaurant: metal and wood
Office fixtures, except metal and wood
Ship furniture
Stools, metal: with casters—not house-
hold or office
Store fixtures, except metal and wood
Tray trucks, restaurant equipment

The Major Group as a Whole

Group No.	Industry No.
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2611 Pulp Mills

Fiber pulp: made from wood, rags, waste paper, linters, straw, and bagasse
Pulp mills

Pulp: soda, sulfate, sulfite, ground-wood, rayon, and semichemical
Rayon pulp
Wood pulp

2621 Paper Mills, Except Building Paper Mills

Establishments primarily engaged in manufacturing paper (except building paper—Industry 2661) from wood pulp and other fibers, and which may also manufacture converted paper products. Pulp mills combined with paper mills, and not separately reported, are also included in this industry; where separately reported, they are classified in Industry 2611. Establishments primarily engaged in manufacturing converted paper products from purchased paper stock are classified in Groups 264 or 265.

Absorbent paper, *mitas*
Bag paper, *mitas*
Blotting paper, *mitas*
Bond paper, *mitas*
Book paper, *mitas*
Bristol, except bogus: *mitas*
Capacitor paper, *mitas*
Catalog paper, *mitas*
Cigarette paper, *mitas*
Cleaning tissue stock
Condenser paper, *mitas*
Cover paper, *mitas*
Facial tissue stock, *mitas*
Filter paper, *mitas*
Glassine wrapping paper, *mitas*
Greaseproof wrapping paper, *mitas*
Groundwood paper
Hanging paper (wallpaper stock),
mitas
Kraft wrapping paper, *mitas*
Lining paper, *mitas*
Lithograph paper, *mitas*
Manila wrapping paper, *mitas*
Matrix paper, *mitas*

Milk filter disks, *mitse*
Napkin stock, paper
News tablet paper, *mitse*
Newsprint
Offset paper
Paper, except building paper: *mitse*
Paper mills, except building paper mills
Parchment paper
Poster paper, *mitse*
Printing paper
Rope and jute wrapping paper, *mitse*
Rotogravure paper
Shipping sack paper, *mitse*
Tagbo uri, made in paper mills
Text paper
Thin paper, *mitse*
Tissue paper, *mitse*
Toilet tissue stock
Towelling paper, *mitse*
Wallpaper stock (hanging paper),
mitse
Wrapping paper, *mitse*
Writing paper, *mitse*

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Group Industry
No. No.**263 PAPERBOARD MILLS****2631 Paperboard Mills**

Establishments primarily engaged in manufacturing paperboard, including paperboard coated on the paperboard machine, from wood pulp and other fibers; and which may also manufacture converted paperboard products. Pulp mills combined with paperboard mills, and not separately reported, are also included in this industry; where separately reported, they are classified in Industry 2611. Establishments primarily engaged in manufacturing converted paperboard products from purchased paperboard are classified in Groups 264 or 265, and building board in Industry 2661.

Binders' board, *mitas*
Board, except building board: *mitas*
Bottle cap board, *mitas*
Boxboard, *mitas*
Bristols, bogus: *mitas*
Cardboard, *mitas*
Chipboard, *mitas*
Clay coated board, *mitas*
Container board, *mitas*
Folding boxboards, *mitas*
Leatherboard, *mitas*
Liner board, kraft and jute: *mitas*
Manila lined board, *mitas*
Matrix board, *mitas*
Milk carton board, *mitas*

Newsboard, *mitas*
Paperboard, except building board: *mitas*
Paperboard mills, except building board mills
Patent coated paperboard, *mitas*
Pressboard, *mitas*
Set-up boxboard, *mitas*
Shoe board, *mitas*
Special food board, *mitas*
Stencil board, *mitas*
Strawboard, except building board: *mitas*
Tagboard, made in paperboard mills
Wet machine board, *mitas*

264 CONVERTED PAPER AND PAPERBOARD PRODUCTS, EXCEPT CONTAINERS AND BOXES**2641 Paper Coating and Glazing**

Establishments primarily engaged in manufacturing coated, glazed, or varnished paper from purchased paper. Also included are establishments primarily manufacturing pressure sensitive tape with backing of any material other than rubber. Establishments primarily engaged in manufacturing carbon paper are classified in Industry 3855 and photographic and blueprint paper in Industry 3861.

Book paper, coated: *m/psm*
Bread wrappers, waxed or laminated: *m/psm*
Cellophane adhesive tape: *m/psm*
Cloth lined paper, *m/psm*
Coated paper (except photographic, carbon, and abrasive paper), *m/psm*
Condenser paper, *m/psm*
Enameled paper, *m/psm*
Eyelets, cloth and paper: *m/psm*
Fancy paper, coated and glazed: *m/psm*
Fly paper, *m/psm*
Glazed paper (except photographic, carbon, and abrasive paper), *m/psm*
Gummed paper, *m/psm*
Gummed tape, cloth and paper base: *m/psm*

Labels, gummed: unprinted, cloth and paper base—*m/psm*
Litmus paper
Masking tape, *m/psm*
Metallic covered paper, *m/psm*
Oiled paper, *m/psm*
Soap impregnated papers and paper wash cloths, *m/psm*
Tape, pressure sensitive: except rubber backed
Tar paper, except building or roofing: *m/psm*
Thermoplastic coated paper, *m/psm*
Towelettes, premoistened, *m/psm*
Transfer paper, gold and silver: *m/psm*
Waxed paper, *m/psm*
Wrapping paper, waterproof: *m/psm*

2642 Envelopes

Establishments primarily engaged in manufacturing envelopes of any description from purchased paper and paperboard. Establishments primarily engaged in manufacturing papeteries (boxed stationery) are classified in Industry 2648.

Envelopes, printed or unprinted: paper, glassine, cellophane, and plico-
film

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STANDARD INDUSTRIAL CLASSIFICATION

Group No. 264 Industry No.

CONVERTED PAPER AND PAPERBOARD PRODUCTS, EXCEPT CONTAINERS AND BOXES—Continued

2643 Bags, Except Textile Bags

Establishments primarily engaged in manufacturing bags from purchased paper, cellophane, acetate, polyethylene, polypropylene, plicofilm, foil, and similar sheet or film materials.

Bags: cement, flour, grocers', moth-proof, shopping, shipping—*m/psm*
Cellophane bags, unprinted: *m/psm*
Coal bags, *m/psm*
Frozen food bags, *m/psm*
Garment bags (throwaway type of plastic film or paper), *m/psm*
Garment storage bags, *m/psm*

Glassine bags, *m/psm*
Merchandise bags, *m/psm*
Plicofilm bags, *m/psm*
Sacks, including multiwall or heavy duty shipping sacks: *m/psm*
Wardrobe bags (closet accessories), *m/psm*

2645 Die-Cut Paper and Paperboard and Cardboard

Establishments primarily engaged in diecutting purchased paper and paperboard; and in manufacturing cardboard by laminating, lining, or surface coating paperboard. Establishments primarily engaged in laminating building paper or building board from purchased paper or board are classified in Industry 2649.

Board, chip: pasted—*m/psm*
Bottle caps and tops, die-cut from purchased paper or paperboard
Card cutting
Cardboard foundations and cut-outs, *m/psm*
Cardboard panels and cut-outs, *m/psm*
Cardboard: pasted, laminated, lined, and surface coated—*m/psm*
Cards, cut and designed; unprinted—*m/psm*
Cards, plain paper: die-cut or rotary cut from purchased materials
Cards, tabulating and time recording: die-cut from purchased paperboard
Cutouts, paper and paperboard: die-cut from purchased material
Die-cut paper and paperboard, *m/psm*
Egg cartons, die-cut paper and paperboard: *m/psm*
Egg case fillers and flats, die-cut from purchased paper or paperboard
Index and other cut cards, *m/psm*
Filing folders, *m/psm*

Jacquard cards, *m/psm*
Jewelers' cards, *m/psm*
Lace, paper: die-cut from purchased materials
Letters, cardboard: *m/psm*
Library cards, *m/psm*
Liners for freight car doors: reinforced with metal strip—*m/psm*
Manila folders, *m/psm*
Milk filter disks, die-cut from purchased paper
Newsboard, pasted: *m/psm*
Photograph folders, mats, mounts, etc.: *m/psm*
Stencil board, *m/psm*
Stencil cards for addressing machines, *m/psm*
Tabulating cards, printed or unprinted: die-cut from purchased paperboard
Time recording cards, die-cut from purchased paperboard
Waterproof cardboard, *m/psm*

2646 Pressed and Molded Pulp Goods

Establishments primarily engaged in manufacturing all kinds of pressed and molded pulp goods, including papier-mache articles other than statuary and art goods (Industry 3299). Establishments primarily engaged in manufacturing plates and utensils from paper are classified in Industry 2654.

Conduits, fiber (pressed pulp): *m/psm*
Cups, pressed and molded pulp: *m/psm*
Dishes, pressed and molded pulp: *m/psm*
Egg cartons, molded pulp: *m/psm*
Egg case filler flats, molded pulp: *m/psm*
False faces, papier mache: *m/psm*
Halloween lanterns, papier mache: *m/psm*
Masks, papier mache: *m/psm*
Papier mache articles, except statuary and art goods—*m/psm*

Pipe and fittings, fiber
Plates, pressed and molded pulp: *m/psm*
Pressed fiber products from wood pulp, *m/psm*
Pulp products, pressed and molded, except statuary: *m/psm*
Spoons, pressed and molded pulp: *m/psm*
Utensils, pressed and molded pulp: *m/psm*

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Group Industry
No. No.**264 CONVERTED PAPER AND PAPERBOARD PRODUCTS, EXCEPT CONTAINERS
AND BOXES—Continued****2647 Sanitary Paper Products**

Establishments primarily engaged in manufacturing, from purchased paper, sanitary paper products, such as facial tissues and handkerchiefs, table napkins, toilet paper, towels, disposable diapers, and sanitary napkins and tampons.

Cleansing tissues, *m/psm*
Diapers, paper: *m/psm*
Facial tissues, *m/psm*
Handkerchiefs, paper: *m/psm*

Napkins, paper: *m/psm*
Napkins, sanitary: *m/psm*
Toilet paper, *m/psm*
Towels, paper: *m/psm*

2648 Stationery, Tablets and Related Products

Establishments primarily engaged in manufacturing stationery, tablets, looseleaf fillers, and related items from purchased paper. Establishments primarily engaged in manufacturing envelopes are classified in Industry 2642.

Correspondence-type tablets, *m/psm*
Desk pads, paper: *m/psm*
Fillers for looseleaf devices, except
printed forms: *m/psm*
Looseleaf fillers and ream paper in
filler sizes, except printed: *m/psm*
Memorandum books, except printed:
m/psm
Newsprint tablets and pads, *m/psm*

Notebooks, including mechanically
bound by wire, plastic, etc.—*m/psm*
Papeteries, *m/psm*
Stationery, *m/psm*
Tablets and parts, book and writing:
m/psm
Writing paper and envelopes, boxed
sets: *m/psm*

2649 Converted Paper and Paperboard Products, Not Elsewhere Classified

Establishments primarily engaged in manufacturing from purchased paper or paperboard miscellaneous converted paper or paperboard products, not elsewhere classified. Establishments primarily engaged in manufacturing sanitary paper products from purchased paper are classified in Industry 2647. The paper stock used for wallpaper called "hanging paper" is classified in Industry 2621. Establishments primarily engaged in manufacturing stationery, tablets and related products are classified in Industry 2648.

Building board, laminated: *m/psm*
Building paper, laminated: *m/psm*
Confetti, *m/psm*
Corrugated paper, *m/psm*
Crepe paper and crepe paper products,
m/psm
Dollies, paper: *m/psm*
Excelsior, paper: *m/psm*
Foli board, *m/psm*
Fuel cell forms, cardboard: *m/psm*
Gift wrappers, paper: *m/psm*
Hats, paper novelties: *m/psm*
Honeycomb core and board, *m/psm*
Insulating batts, fills, and blankets:
paper—*m/psm*
Novelties, paper: *m/psm*
Pallet spacers, fiber: *m/psm*
Paper, building: laminated—*m/psm*

Paper, corrugated: *m/psm*
Paper, crepe: and crepe paper prod-
ucts: *m/psm*
Pin tickets, paper: *m/psm*
Rolls, paper: adding machine, tele-
graph tape, etc.—*m/psm*
Tags, paper: unprinted—*m/psm*
Telegraph tape, paper: *m/psm*
Teletypewriter paper, rolls with car-
bon: *m/psm*
Wall tile, enameled masonite: *m/psm*
Wallboard, decorated: *m/psm*
Wallpaper, embossed plastic: made on
textile backing
Wallpaper, *m/psm*
Wrappers, paper except coated, oiled,
or waxed: unprinted—*m/psm*

265 PAPERBOARD CONTAINERS AND BOXES**2651 Folding Paperboard Boxes**

Establishments primarily engaged in manufacturing folding paperboard boxes from purchased paperboard.

Boxes, folding paperboard: *m/psm*

Paperboard backs for blister or skin
packages: *m/psm*

2652 Set-up Paperboard Boxes

Establishments primarily engaged in manufacturing set-up paperboard boxes from purchased paperboard.

Boxes, newsboard: metal edged—*m/psm*
Boxes, set-up paperboard: *m/psm*

Filing boxes, paperboard: *m/psm*

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STANDARD INDUSTRIAL CLASSIFICATION

Group No. Industry No.

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PAPERBOARD CONTAINERS AND BOXES—Continued

2653 Corrugated and Solid Fiber Boxes

Establishments primarily engaged in manufacturing corrugated and solid fiber boxes and related products from purchased paperboard or fiber stock. Important products of this industry include corrugated and solid fiberboard boxes, pads, partitions, display items, pallets, single face products, and corrugated sheets.

Boxes, corrugated and solid fiber: *m/psm*
 Display items, corrugated and solid fiberboard: *m/psm*
 Hampers, shipping: paperboard and solid fiber—*m/psm*
 Pads, corrugated and solid fiberboard: *m/psm*

Pallets, corrugated and solid fiberboard: *m/psm*
 Partitions, corrugated and solid fiberboard: *m/psm*
 Sheets, corrugated and solid fiberboard: *m/psm*

2654 Sanitary Food Containers

Establishments primarily engaged in manufacturing food containers from special food board. Important products of this industry include fluid milk containers; folding paraffined cartons for butter, margarine, and shortening; ice cream containers; frozen food containers; liquid tight containers; round nested food containers; paper cups for hot or cold drinks; pails for food and ice cream; and stamped plates, dishes, spoons and similar products. Establishments primarily engaged in manufacturing similar items of plastics materials are classified in Industry 3070.

Bottles, milk: paper—*m/psm*
 Cups, paper: *m/psm* except those made from pressed or molded pulp
 Dishes, paper: *m/psm* except those made from pressed or molded pulp
 Drinking cups, paper: *m/psm* except those made from pressed or molded pulp
 Drinking straws, except glass or plastic: *m/psm*
 Food containers, liquid tight: sanitary—*m/psm*

Milk bottles, paper: *m/psm*
 Pails, sanitary food: *m/psm*
 Plates, paper: *m/psm* except those made from pressed or molded pulp
 Soda straws, except glass or plastic: *m/psm*
 Spoons, paper: *m/psm* except those made from pressed or molded pulp
 Utensils, paper: *m/psm* except those made from pressed or molded pulp

2655 Fiber Cans, Tubes, Drums, and Similar Products

Establishments primarily engaged in manufacturing from purchased materials fiber cans, cones, drums, and similar products with or without metal ends, and vulcanized fiber boxes.

Ammunition cans or tubes, paperboard laminated with metal foil: *m/psm*
 Bobbins, fiber: *m/psm*
 Bottles, paper fiber: *m/psm*
 Boxes, vulcanized fiber: *m/psm*
 Candelabra tubes, fiber: *m/psm*
 Cans, composite: foil—fiber and other combinations, *m/psm*
 Cans, fiber (metal end or all fiber): *m/psm*
 Cases, mailing: paper fiber (metal end or all fibers): *m/psm*
 Cones, fiber: for winding yarn, string, ribbons, or cloth—*m/psm*
 Containers, laminated phenolic and vulcanized fiber: *m/psm*
 Containers, liquid tight fiber (except sanitary food containers): *m/psm*
 Cores, fiber (metal end or all fiber): *m/psm*
 Drums, fiber (metal end or all fiber): *m/psm*

Hampers, shipping: vulcanized fiber—*m/psm*
 Mailing cases and tubes, paper fiber (metal end or all fiber): *m/psm*
 Pans and volds, fiber or cardboard: *m/psm*
 Reels, textile: fiber—*m/psm*
 Ribbon blocks, fiber: *m/psm*
 Spools, fiber (metal end or all fiber): *m/psm*
 Textile reels, fiber: *m/psm*
 Textile spinning bobbins, fiber (metal end or all fiber): *m/psm*
 Tubes, fiber or paper (with or without metal ends): *m/psm*
 Tubes, for chemical and electrical uses: impregnated paper or fiber—*m/psm*
 Wastebaskets, fiber (metal end or all fiber): *m/psm*

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Group Industry
No. No.
266

BUILDING PAPER AND BUILDING BOARD MILLS**2661 Building Paper and Building Board Mills**

Establishments primarily engaged in manufacturing building paper and building board from wood pulp and other fibrous materials. Pulp mills combined with building paper and building board mills, and not separately reported, are also included in this industry; where separately reported, they are classified in Industry 2611.

Asbestos paper and asbestos filled paper, *mitae*
Asphalt board and sheathing, *mitae*
Asphalt paper: laminated—*mitae*
Board, building: composition, cellular fiber, and hard pressed—*mitae*
Board, building: except gypsum—*mitae*
Building board, *mitae*
Building paper: sheathing, insulation, saturating, and dry felts—*mitae*
Construction paper, *mitae*
Dry felts, *mitae*
Felts, building: unsaturated—*mitae*
Fiber board, wood or other vegetable pulp: *mitae*
Insulating siding, paper or board, *mitae*

Insulation board, cellular fiber or hard pressed (without gypsum): *mitae*
Kraft sheathing paper, *mitae*
Lath, fiber: *mitae*
Paper, building: *mitae*
Paperboard, building (containing no gypsum): *mitae*
Roofing board and felt stock, unsaturated: *mitae*
Roofing, wood fiber: *mitae*
Saturated felts, *mitae*
Tar paper, building and roofing: *mitae*
Wall tile, fiber board: *mitae*
Wallboard, except gypsum: cellular fiber or hard pressed—*mitae*

Major Group 27.—PRINTING, PUBLISHING, AND ALLIED INDUSTRIES

The Major Group as a Whole

This major group includes establishments engaged in printing by one or more of the common processes, such as letterpress, lithography, gravure, or screen; and those establishments which perform services for the printing trade, such as bookbinding, typesetting, engraving, photoengraving, and electrotyping. This major group also includes establishments engaged in publishing newspapers, books, and periodicals, regardless of whether or not they do their own printing. News syndicates are classified in Service Industries, (Industry 7351), and textile printing and finishing in Major Group 22.

Group Industry
No. No.

271 NEWSPAPERS: PUBLISHING, PUBLISHING AND PRINTING

2711 Newspapers: Publishing, Publishing and Printing

Establishments primarily engaged in publishing newspapers, or in publishing and printing newspapers. These establishments carry on the various operations necessary for issuing newspapers, including the gathering of news and the preparation of editorials and advertisements, but may or may not perform their own printing. Commercial printing is frequently carried on by establishments engaged in publishing and printing newspapers, but, even though the commercial printing may be of major importance, such establishments are included in this industry. Establishments not engaged in publishing newspapers, but which print or lithograph newspapers for publishers, are classified in Industry Group 275. News syndicates are classified in Service Industries (Industry 7351).

Commercial printing and newspaper
publishing combined
Job printing and newspaper publishing
combined

Newspaper branch offices, editorial and
advertising
Newspapers: publishing and printing,
or publishing only

272 PERIODICALS: PUBLISHING, PUBLISHING AND PRINTING

2721 Periodicals: Publishing, Publishing and Printing

Establishments primarily engaged in publishing periodicals, or in preparing, publishing, and printing periodicals. These establishments carry on the various operations necessary for issuing periodicals, but may or may not perform their own printing. Establishments not engaged in publishing periodicals, but which print or lithograph periodicals for publishers, are classified in Industry Group 275.

Comic books: publishing and printing,
or publishing only
Magazines: publishing and printing, or
publishing only
Periodicals: publishing and printing,
or publishing only

Statistical reports (periodicals), pub-
lishing of
Trade journals, publishing of

273 BOOKS

2731 Books: Publishing, Publishing and Printing

Establishments primarily engaged in publishing only, or in publishing and printing books and pamphlets. Establishments primarily engaged in printing or in printing and binding (but not publishing) books and pamphlets are classified in Industry 2732.

Book clubs, publishing
Book music: publishing and printing,
or publishing only

Books: publishing and printing, or
publishing only
Pamphlets: publishing and printing, or
publishing only

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Group Industry
No. No.**273 BOOKS—Continued****2732 Book Printing**

Establishments primarily engaged in printing only or in printing and binding books and pamphlets, but not engaged in publishing. Establishments primarily engaged in publishing, or in publishing and printing books and pamphlets are classified in Industry 2731. Establishments engaged in both printing and binding books, but primarily binding books printed elsewhere, are classified in Industry 2789.

Book music: printing, printing and
binding—not publishing
Books: printing, printing and bind-
ing—not publishing

Pamphlets: printing, or printing and
binding—not publishing

274 MISCELLANEOUS PUBLISHING**2741 Miscellaneous Publishing**

Establishments primarily engaged in miscellaneous publishing activities, not elsewhere classified, whether or not engaged in printing. Establishments primarily engaged in offering financial, credit, or other business services, and which may publish directories as part of this service, are not included in this industry but are classified in Service Industries.

Atlases: publishing and printing, or
publishing only
Catalogs: publishing and printing, or
publishing only
Directories: publishing and printing,
or publishing only
Globe covers (maps): publishing and
printing, or publishing only
Guides: publishing and printing, or
publishing only
Maps: publishing and printing, or pub-
lishing only

Micropublishing
Music, book or sheet: publishing and
printing, or publishing only
Patterns, paper: publishing and print-
ing, or publishing only
Race track programs: publishing and
printing or publishing only
Shopping news: publishing and print-
ing, or publishing only
Technical manuals and papers: pub-
lishing and printing, or publishing
only
Telephone directories: publishing and
printing, or publishing only

275 COMMERCIAL PRINTING**2751 Commercial Printing, Letterpress and Screen**

Establishments primarily engaged in letterpress and screen commercial or job printing, including flexographic. This industry includes general printing shops, as well as shops specializing in printing newspapers and periodicals for others, and those which specialize in screen printing. Establishments primarily engaged in printing books, without publishing, are classified in Industry 2732, and greeting cards in Industry 2771. Establishments primarily engaged in printing from lithographic plates are classified in Industry 2752, and gravure and rotogravure printing in Industry 2754.

Bags, cellophane: letterpress and
screen printing
Bread wrappers, letterpress and screen
printing
Business forms, except manifold: let-
terpress and screen printing
Calendars: letterpress and screen print-
ing
Cards, except greeting: letterpress and
screen printing
Catalogs: letterpress and screen print-
ing (not publishing)
Circulars: letterpress and screen print-
ing
Color printing: letterpress and screen
printing
Coupons: letterpress and screen print-
ing
Decalcomanias, screen printing
Directories: letterpress and screen
printing (not publishing)
Embossing on paper
Engraving, plateless
Envelopes: letterpress and screen
printing

Facsimile letters: letterpress and
screen printing
Fashion plates: letterpress and screen
printing
Flexographic printing
Gummed labels and seals: letterpress
and screen printing
Imprinting: letterpress and screen
printing
Labels, printing or embossing only
Letterpress printing, screen and flexo-
graphic
Letters, circular and form: letterpress
and screen printing
Magazines: letterpress and screen
printing (not publishing)
Maps: letterpress and screen printing
(not publishing)
Menus: letterpress and screen printing
Music, sheet: letterpress and screen
printing (not publishing)
Newspapers: letterpress printing (not
publishing)
Periodicals: letterpress printing (not
publishing)

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

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COMMERCIAL PRINTING—Continued

2751 Commercial Printing, Letterpress and Screen—Continued

Plateless engraving
Playing cards: letterpress and screen printing
Post cards, picture: letterpress and screen printing
Posters including billboard: letterpress and screen printing
Printing, commercial or job: letterpress and screen
Printing: letterpress, screen and flexographic
Ready prints
Schedules, transportation: letterpress and screen printing
Screen printing, except on textiles
Screen printing on glass, plastic, paper and metal including highway signs

Seals: printing or embossing only
Souvenir cards: letterpress and screen printing
Stationery: letterpress and screen printing
Tags: printing and embossing only
Telephone directories: letterpress printing (not publishing)
Thermography
Tickets: letterpress and screen printing
Trading stamps: letterpress and screen printing
Visiting cards: letterpress and screen printing
Wrappers: letterpress and screen (including flexographic) printing

2752 Commercial Printing, Lithographic

Establishments primarily engaged in printing by the lithographic process. The greater part of the work in this industry is performed on a job or custom basis; but in some cases lithographed calendars, maps, posters, decalcomanias, etc., are made for sale. Offset printing, photo-offset printing, and photolithographing are also included in this industry. Establishments primarily engaged in lithographing books and pamphlets, without publishing, are classified in Industry 2782, and greeting cards in Industry 2771. Establishments primarily engaged in preparing lithographic plates and in related services are classified in Industry 2795.

Advertising posters, lithographed
Atlases, lithographed
Billheads, lithographed
Bread wrappers, lithographing only
Business forms, except manifold: lithographed
Calendars, lithographed
Cards, lithographing only
Circulars, lithographed
Color cards, paint: offset printing
Color lithography
Coupons, lithographing of
Decalcomanias (dry transfers), lithographed
Fashion plates, lithographed
Labels, lithographed
Letters, circular and form: lithographed
Lithographing on metal or paper
Maps, lithographing only
Menus, lithographed
Newspapers, lithographing only

Offset printing
Periodicals, lithographing only
Photo-lithographing
Photo-offset printing
Planographing
Playing cards, lithographed
Post cards, picture: lithographed
Posters, lithographed
Printing from lithographic plates
Printing, offset
Printing, photo-offset
Schedules, transportation: lithographed
Seals, lithographed
Souvenir cards, lithographed
Tags, lithographed
Tickets, lithographed
Trading stamps, lithographed
Transferring designs (lithographing)
Transfers, decalcomania and dry: lithographed
Visiting cards, lithographed
Wrappers, lithographing of

2753 Engraving and Plate Printing

Establishments primarily engaged in engraving and etching steel, copper, wood, or rubber plates; in using these plates to print stationery, visiting and other cards, invitations, maps, etc.; and in making woodcuts for use in printing illustrations, posters, etc. Engraving for purposes other than printing is classified in Industry 3479.

Announcements, engraved
Bank notes, engraved
Calendars, engraved
Cards, except greeting cards: engraving of
Currency, engraving of
Embossing plates for printing
Engraving of cards, except greeting cards
Engraving on copper, steel, wood, or rubber plates, for printing purposes
Engraving on textile printing rolls
Engraving, steel line: for printing purposes
Etching on copper, steel, wood, or rubber plates, for printing purposes

Halftones, engraved
Invitations, engraved
Maps, engraved
Plate printing
Post cards, picture: engraved
Printing from engraved and etched plates
Security certificates, engraved
Souvenir cards, engraved
Stationery, engraved
Stock certificates, engraved
Visiting cards, engraved
Woodcuts for use in printing illustrations, posters, etc.

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Group Industry
No. No.

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COMMERCIAL PRINTING—Continued**2754 Commercial Printing, Gravure**

Establishments primarily engaged in gravure printing.

Bread wrappers, gravure printing
 Business forms, except manifold: gravure printing
 Calendars: gravure printing
 Cards, except greeting: gravure printing
 Catalogs: gravure printing (not publishing)
 Circulars: gravure printing
 Color printing: gravure
 Coupons: gravure printing
 Directories: gravure printing (not publishing)
 Envelopes: gravure printing
 Facsimile letters: gravure printing
 Fashion plates: gravure printing
 Gummed labels and seals: gravure printing
 Imprinting: gravure
 Letters, circular and form: gravure printing
 Magazines: gravure printing (not publishing)
 Maps: gravure printing (not publishing)

Menus: gravure printing
 Music, sheet: gravure printing (not publishing)
 Newspapers: gravure printing (not publishing)
 Periodicals: gravure printing (not publishing)
 Plates and cylinders, rotogravure printing: preparation of
 Playing cards: gravure printing
 Post cards, picture: gravure printing
 Posters: gravure printing
 Printing, commercial or job: gravure
 Printing: gravure, photogravure, rotary photogravure, and rotogravure
 Schedules, transportation: gravure printing
 Souvenir cards: gravure printing
 Stationery: gravure printing
 Telephone directories: gravure printing (not publishing)
 Tickets: gravure printing
 Trading stamps: gravure printing
 Visiting cards: gravure printing
 Wrappers: gravure printing

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MANIFOLD BUSINESS FORMS**2761 Manifold Business Forms**

Establishments primarily engaged in designing and printing, by any process, special forms for use in the operation of a business, in single and multiple sets, including carbonized or interleaved with carbon or otherwise processed for multiple reproduction.

Autographic register forms, printed
 Business forms, manifold
 Continuous forms, office and business: carbonized or multiple reproduction

Fanfold forms
 Sales books
 Strip forms (manifold business forms)
 Unit sets (manifold business forms)

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GREETING CARD PUBLISHING**2771 Greeting Card Publishing**

Establishments primarily engaged in the designing, publishing, and printing by any process of greeting cards for all occasions.

Birthday cards, except hand painted: printed, engraved, lithographed, etc.
 Christmas cards, except hand painted
 Easter cards, except hand painted: printed, engraved, lithographed, etc.

Greeting cards, except hand painted: printed, engraved, lithographed, etc.
 Valentines, except hand painted: printed, engraved, lithographed, etc.

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BLANKBOOKS, LOOSELEAF BINDERS, AND BOOKBINDING AND RELATED WORK**2782 Blankbooks, Looseleaf Binders and Devices**

Establishments primarily engaged in manufacturing blankbooks, looseleaf devices, and library binders; and in ruling paper.

Account books
 Albums
 Blankbook making
 Chart and graph paper, ruled
 Checkbooks
 Diaries
 Inventory blankbooks
 Ledgers and ledger sheets
 Library binders, looseleaf
 Looseleaf devices and binders

Looseleaf forms and fillers, pen ruled or printed only
 Memorandum books, printed
 Paper ruling
 Pass books: bank, etc.
 Receipt books
 Record albums
 Sample books
 Scrapbooks

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**278 BLANKBOOKS, LOOSELEAF BINDERS, AND BOOKBINDING AND RELATED WORK—Continued****2789 Bookbinding and Related Work**

Establishments primarily engaged in edition, trade, job, and library bookbinding; in book or paper bronzing, gilding, and edging; in map and sample mounting; and other services related to bookbinding. Establishments primarily binding books printed elsewhere are classified in this industry, but those primarily binding books printed in the same establishment are classified in Group 278.

Beveling of cards
Binding only: books, pamphlets, magazines, etc.
Book gilding, bronzing, edging, deckling, embossing, and gold stamping
Bookbinding: edition, job, library, and trade
Bronzing books, cards, or paper
Display mounting
Edging books, cards, or paper
Magazines, binding only
Mounting of maps and samples, for the trade

Pamphlets, binding only
Paper bronzing, gilding, edging, and deckling
Paper cutting, except diecutting
Rebinding books, magazines, or pamphlets
Repairing books (bookbinding)
Swatches and samples, mounting for the trade
Trade binding services

279 SERVICE INDUSTRIES FOR THE PRINTING TRADE**2791 Typesetting**

Establishments primarily engaged in typesetting for the trade, including advertisement typesetting.

Advertisement typesetting
Composition, hand: for the printing trade
Composition, machine: linotype, monotype, etc.—for the printing trade

Photocomposition
Typesetting, for the printing trade
Typographic composition

2793 Photoengraving

Establishments primarily engaged in preparing photoengraved plates (halftones and linecuts). These establishments do not, as a rule, print from the plates which they make, but prepare them for use by others.

Halftones (photoengraving plates)
Linecuts (photoengraving plates)

Photoengraving for the trade

2794 Electrotyping and Stereotyping

Establishments primarily engaged in preparing electrotypes and stereotype plates. These establishments do not, as a rule, print from the plates which they make, but prepare them for use by others.

Electrotype plates
Electrotyping for the trade

Stereotype plates
Stereotyping for the trade

2795 Lithographic Platemaking and Related Services

Establishments primarily engaged in making lithographic plates and positives or negatives from which lithographic plates are made, and in related services. Establishments primarily engaged in printing by the lithographic process are classified in Industry 2752.

Lithographic plates or positives or negatives, preparation of

MANUFACTURING

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Major Group 28.—CHEMICALS AND ALLIED PRODUCTS*The Major Group as a Whole*

This major group includes establishments producing basic chemicals, and establishments manufacturing products by predominantly chemical processes. Establishments classified in this major group manufacture three general classes of products: (1) basic chemicals such as acids, alkalies, salts, and organic chemicals; (2) chemical products to be used in further manufacture such as synthetic fibers, plastics materials, dry colors, and pigments; (3) finished chemical products to be used for ultimate consumption such as drugs, cosmetics, and soaps; or to be used as materials or supplies in other industries such as paints, fertilizers, and explosives. The mining of natural rock salt is classified in mining industries. Establishments primarily engaged in manufacturing nonferrous metals and high percentage ferroalloys are classified in Major Group 33; silicon carbide in Major Group 32; baking powder, other leavening compounds, and starches in Major Group 20; and artists' colors in Major Group 39. Establishments primarily engaged in packaging, repackaging, and bottling of purchased chemical products, but not engaged in manufacturing chemicals and allied products, are classified in trade industries.

Group No. Industry No.

281 INDUSTRIAL INORGANIC CHEMICALS

This group includes establishments primarily engaged in manufacturing basic industrial inorganic chemicals. Establishments primarily engaged in manufacturing formulated agricultural pesticides are classified in Industry 2879; medicinal chemicals, drugs and medicines in Industry 2833; and soap and cosmetics in Group 284.

2812 Alkalies and Chlorine

Establishments primarily engaged in manufacturing alkalies and chlorine.

Alkalies	Potassium hydroxide
Carbonates, potassium and sodium	Salt soda
Caustic potash	Soda ash
Caustic soda	Sodium bicarbonate
Chlorine, compressed or liquefied	Sodium carbonate (soda ash)
Potassium carbonate	Sodium hydroxide (caustic soda)

2813 Industrial Gases

Establishments primarily engaged in manufacturing gases for sale in compressed, liquid, and solid forms. Establishments primarily engaged in manufacturing fluorine and sulfur dioxide are classified in Industry 2819; household ammonia in Industry 2842, and other ammonia in Industry 2873; and chlorine in Industry 2812. Distributors of industrial gases and establishments primarily engaged in shipping liquid oxygen are classified in trade.

Acetylene	Helium
Argon	Hydrogen
Carbon dioxide	Neon
Dry ice (solid carbon dioxide)	Nitrogen
Gases, industrial: compressed, liquefied, or solid—mfgm	Nitrous oxide
	Oxygen, compressed and liquefied

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

281

INDUSTRIAL INORGANIC CHEMICALS—Continued

2816 Inorganic Pigments

Establishments primarily engaged in manufacturing inorganic pigments. Important products of this industry include black pigments (except carbon black, Industry 2895), white pigments and color pigments. Organic color pigments, except animal black and bone black, are classified in Industry 2865.

Animal black
Barium sulfate, precipitated (blanc
fixé)
Barytes pigments
Black pigments, except carbon black
Blanc fixe (barium sulfate, precipi-
tated)
Bone black
Chrome pigments: chrome green,
chrome yellow, chrome orange, zinc
yellow
Color pigments, inorganic
Iron blue pigment
Iron colors
Iron oxide, black
Iron oxide, magnetic
Iron oxide, yellow
Lamp black
Lead oxide pigments
Lead pigments
Litharge

Lithopone
Metallic pigments, inorganic
Mineral colors and pigments
Minium (pigment)
Ochers
Paint pigments, inorganic
Pearl essence
Pigments, inorganic
Prussian blue pigments
Red lead pigment
Satin white pigment
Siennas
Titanium pigments
Ultramarine pigment
Umbers
Vermilion pigment
White lead pigments
Whiting
Zinc oxide pigments
Zinc pigments: zinc yellow and zinc
sulphide

2819 Industrial Inorganic Chemicals, Not Elsewhere Classified

Establishments primarily engaged in manufacturing industrial inorganic chemicals, not elsewhere classified. Important products of this industry include inorganic salts of sodium (excluding refined sodium chloride), potassium, aluminum, calcium, chromium, magnesium, mercury, nickel, silver, tin; inorganic compounds such as alums, calcium carbide, hydrogen peroxide, sodium silicate, ammonia compounds (except fertilizers), rare earth metal salts and elemental bromine, fluorine, iodine, phosphorus, and alkali metals (sodium, potassium, lithium, etc.). Establishments primarily engaged in mining, milling, or otherwise preparing natural potassium, sodium, or boron compounds (other than common salt) are classified in Industry 1474. Establishments primarily engaged in manufacturing household bleaches are classified in Industry 2842; phosphoric acid in Industry 2874; and nitric acid, anhydrous ammonia and other nitrogenous fertilizer materials in Industry 2873.

Activated carbon and charcoal
Alkali metals
Alumina
Aluminum chloride
Aluminum compounds
Aluminum hydroxide (alumina trihy-
drate)
Aluminum oxide
Aluminum sulfate
Alums
Ammonia alum
Ammonium chloride, hydroxide, and
molybdate
Ammonium compounds, except for fer-
tilizer
Ammonium perchlorate
Ammonium thiosulfate
Barium compounds
Bauxite, refined
Beryllium oxide
Bleaching powder
Borax (sodium tetraborate)
Boric acid
Boron compounds, not produced at
mines
Borosilicate
Brine

Bromine, elemental
Caesium metal
Calcium carbide, chloride, and hypo-
chlorite
Calcium compounds, inorganic
Calcium metal
Calomel
Carbide
Catalysts, chemical
Cerium salts
Charcoal, activated
Chlorosulfonic acid
Chromates and bichromates
Chromic acid
Chromium compounds, inorganic
Chromium salts
Chromium chloride
Cobalt 60 (radioactive)
Cobalt sulfate
Copper chloride
Copper iodide and oxide
Copper sulfate
Cyanides
Desiccants, activated: silica gel
Dichromates
Ferric chloride
Ferrocyanides

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Group Industry
No. No.

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INDUSTRIAL INORGANIC CHEMICALS—Continued

2819 Industrial Inorganic Chemicals, Not Elsewhere Classified—Continued

Flammable material production
 Fluorine, elemental
 Fuel propellants, solid: inorganic
 Fuels, high energy: inorganic
 Glauber's salt
 Heavy water
 High purity grade chemicals, inorganic: refined from technical grades
 Hydrated alumina silicate powder
 Hydrochloric acid
 Hydrocyanic acid
 Hydrofluoric acid
 Hydrogen peroxide
 Hydrogen sulfide
 Hydrosulfites
 Hypophosphites
 Iodine chloride
 Inorganic acids, except nitric or phosphoric
 Iodides
 Iodine, elemental
 Iodine, resublimed
 Iron sulphate
 Isotopes, radioactive
 Laboratory chemicals, inorganic
 Lead oxides, other than pigments
 Lead silicate
 Lime bleaching compounds
 Lithium compounds
 Lithium metal
 Luminous compounds, radium
 Magnesium carbonate
 Magnesium chloride
 Magnesium compounds, inorganic
 Manganese dioxide powder, synthetic
 Mercury chlorides (calomel, corrosive, sublimate), except U.S.P.
 Mercury compounds, inorganic
 Mercury oxides
 Mercury, redistilled
 Metals, liquid
 Mixed acid
 Muriate of potash, not produced at mines
 Nickel ammonium sulfate
 Nickel carbonate
 Nickel compounds, inorganic
 Nickel sulfate
 Nuclear cores, inorganic
 Nuclear fuel reactor cores, inorganic
 Nuclear fuel scrap reprocessing
 Oleum (fuming sulfuric acid)
 Oxidation catalyst made from porcelain
 Perchloric acid
 Peroxides, inorganic
 Phosphates, except defluorinated and ammoniated
 Phosphorus and phosphorus oxychloride
 Potash alum
 Potassium aluminum sulfate
 Potassium bichromate and chromate
 Potassium bromide
 Potassium chlorate
 Potassium chloride and cyanide
 Potassium compounds, inorganic: except potassium hydroxide and carbonate
 Potassium cyanide
 Potassium hypochlorate
 Potassium iodide
 Potassium metal
 Potassium nitrate and sulfate
 Potassium permanganate
 Propellants for missiles, solid: inorganic
 Radium chloride
 Radium luminous compounds
 Rare earth metal salts
 Reagent grade chemicals, inorganic: refined from technical grades
 Rubidium metal
 Salt cake (sodium sulfate)
 Salts of rare earth metals
 Scandium
 Silica, amorphous
 Silica gel
 Silicofluorides
 Silver bromide, chloride, and nitrate
 Silver compounds, inorganic
 Soda alum
 Sodium aluminate
 Sodium aluminum sulfate
 Sodium antimonate
 Sodium bichromate and chromate
 Sodium borates
 Sodium borohydride
 Sodium bromide, not produced at mines
 Sodium chlorate
 Sodium compounds, inorganic
 Sodium cyanide
 Sodium hydrosulfite
 Sodium, metallic
 Sodium molybdate
 Sodium perborate
 Sodium peroxide
 Sodium phosphate
 Sodium polyphosphate
 Sodium silicate
 Sodium silicofluoride
 Sodium stannate
 Sodium sulfate—bulk or tablets
 Sodium tetraborate, not produced at mines
 Sodium thiosulfate
 Sodium tungstate
 Sodium uranate
 Stannic and stannous chloride
 Strontium carbonate, precipitated, and oxide
 Strontium nitrate
 Sublimate, corrosive
 Sulfate of potash and potash magnesia, not produced at mines
 Sulfides and sulfites
 Sulfocyanides
 Sulfur chloride
 Sulfur dioxide
 Sulfur hexafluoride gas
 Sulfur, recovered or refined, including from sour natural gas
 Sulfuric acid
 Tanning agents, synthetic inorganic
 Thiocyanates, inorganic
 Tin chloride
 Tin compounds, inorganic
 Tin oxide
 Tin salts
 Uranium slug, radioactive
 Water glass
 Zinc chloride

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.
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PLASTICS MATERIALS AND SYNTHETIC RESINS, SYNTHETIC RUBBER, SYNTHETIC AND OTHER MAN-MADE FIBERS, EXCEPT GLASS

This group includes chemical establishments primarily engaged in manufacturing plastics materials and synthetic resins, synthetic rubbers, and cellulosic and man-made organic fibers. Establishments primarily engaged in the manufacture of rubber products, and those primarily engaged in the compounding of purchased resins or the fabrication of plastics sheets, rods, and miscellaneous plastics products, are classified in Major Group 30; and textile mills primarily engaged in throwing, spinning, weaving, or knitting textile products from manufactured fibers are classified in Major Group 22.

2821 Plastics Materials, Synthetic Resins, and Nonvulcanizable Elastomers

Establishments primarily engaged in manufacturing synthetic resins, plastics materials, and nonvulcanizable elastomers. Important products of this industry include: cellulose plastic materials; phenolic and other tar acid resins; urea and melamine resins; vinyl resins; styrene resins; alkyd resins; acrylic resins; polyethylene resins; polypropylene resins; rosin modified resins; coumarone-indene and petroleum polymer resins; and miscellaneous resins including polyamide resins, silicones, polyisobutylenes, polyesters, polycarbonate resins, acetal resins, fluorohydrocarbon resins; and casein plastics. Establishments primarily engaged in manufacturing fabricated plastics products or plastics film, sheet, rod, nontextile monofilaments and regenerated cellulose products, and vulcanized fiber are classified in Industry 3079, whether from purchased resins or from resins produced in the same plant. Establishments primarily engaged in compounding purchased resins are also classified in Industry 3079. Establishments primarily manufacturing adhesives are classified in Industry 2891.

Acetal resins	Nylon resins
Acetate, cellulose (plastics)	Petroleum polymer resins
Acrylic resins	Phenol-furfural resins
Acrylonitrile-butadiene-styrene resins	Phenolic resins
Alcohol resins, polyvinyl	Phenoxy resins
Alkyd resins	Phthalic alkyd resins
Allyl resins	Phthalic anhydride resins
Butadiene copolymers, containing less than 50% butadiene	Polyacrylonitrile resins
Carbohydrate plastics	Polyamide resins
Casein plastics	Polycarbonate resins
Cellulose nitrate resins	Polyesters
Cellulose propionate (plastics)	Polyethylene resins
Coal tar resins	Polyhexamethylenediamine adipamide resins
Condensation plastics	Polyisobutylenes
Coumarone-indene resins	Polymerization plastics, except fibers
Cresol-furfural resins	Polypropylene resins
Cresol resins	Polystyrene resins
Dicyandiamine resins	Polyurethane resins
Diisocyanate resins	Polyvinyl chloride resins
Elastomers, nonvulcanizable (plastics)	Polyvinyl halide resins
Epichlorohydrin bisphenol	Polyvinyl resins
Epichlorohydrin diphenol	Protein plastics
Epoxy resins	Pyroxylin
Ester gum	Resins, phenolic
Ethyl cellulose plastics	Resins, synthetic: coal tar and non-coal tar
Ethylene-vinyl acetate resins	Rosin modified resins
Fluorohydrocarbon resins	Silicone fluid solution (fluid for sonar transducers)
Ion exchange resins	Silicone resins
Ionomer resins	Soybean plastics
Isobutylene polymers	Styrene resins
Lignin plastics	Styrene-acrylonitrile resins
Melamine resins	Tar acid resins
Methyl acrylate resins	Urea resins
Methyl cellulose plastics	Vinyl resins
Methyl methacrylate resins	
Molding compounds, plastics	
Nitrocellulose plastics (pyroxylin)	

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Group Industry
No. No.
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PLASTICS MATERIALS AND SYNTHETIC RESINS, SYNTHETIC RUBBER, SYNTHETIC AND OTHER MAN-MADE FIBERS, EXCEPT GLASS—Continued

2822 Synthetic Rubber (Vulcanizable Elastomers)

Establishments primarily engaged in manufacturing synthetic rubber by polymerization or copolymerization. An elastomer for the purpose of this classification is a rubber-like material capable of vulcanization, such as copolymers of butadiene and styrene, or butadiene and acrylonitrile, polybutadienes, chloroprene rubbers, and isobutylene-isoprene copolymers. Butadiene copolymers containing less than 50% butadiene are classified in Industry 2821. Natural chlorinated rubbers and cyclized rubbers are considered as semifinished products and are classified in Industry 3069.

Acrylate type rubbers	Isoprene rubbers, synthetic
Acrylate-butadiene rubbers	Neoprene
Acrylic rubbers	Nitrile-butadiene rubbers
Adiprene	Nitrile-chloroprene rubbers
Butadiene-acrylonitrile copolymers (over 50% butadiene)	Nitrile type rubber
Butadiene rubbers	N-type rubber
Butadiene-styrene copolymers (over 50% butadiene)	Polybutadienes
Butyl rubber	Polyethylenes, chlorosulfonated
Chlorinated rubbers, synthetic	Polyisobutylene-isoprene elastomers
Chloroprene type rubbers	Polyisobutylene (synthetic rubber)
Chlorosulfonated polyethylenes	Polymethylene rubbers
Cyclo rubbers, synthetic	Polysulfides
EPDM polymers	Pyridine-butadiene copolymers
Elastomers, vulcanizable (synthetic rubber)	Pyridine-butadiene rubbers
Epichlorohydrin elastomers	Rubber, synthetic
Estane	Silicone rubbers
Ethylene-propylene rubbers	S-type rubber
Fluoro rubbers	Stereo regular elastomers
Fluorocarbon derivative rubbers	Styrene-butadiene rubbers (50% or less styrene content)
Hypalon	Styrene-chloroprene rubbers
Isobutylene-isoprene rubbers	Styrene-isoprene rubbers
Isocyanate type rubber	Thiol rubbers
	Urethane rubbers
	Vulcanized oils

2823 Cellulosic Man-Made Fibers

Establishments primarily engaged in manufacturing cellulosic fibers (including cellulose acetate and regenerated cellulose such as rayon by the viscose or cuprammonium process) in the form of monofilament, yarn, staple or tow suitable for further manufacturing on spindles, looms, knitting machines or other textile processing equipment. Establishments primarily engaged in manufacturing textile glass fibers are classified in Industry 3229.

Acetate fibers	Rayon primary products: fibers, straw, strips, and yarn
Cellulose acetate monofilament, yarn, staple, or tow	Rayon yarn, made in chemical plants (primary products)
Cellulose fibers, man-made	Regenerated cellulose fibers
Cigarette tow, cellulosic fiber	Triacetate fibers
Cuprammonium fibers	Viscose fibers, bands, strips, and yarn
Fibers, cellulose man-made	Yarn, cellulosic: made in chemical plants (primary products)
Fibers, rayon	
Horsehair, artificial: rayon	
Nitrocellulose fibers	

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**282 PLASTICS MATERIALS AND SYNTHETIC RESINS, SYNTHETIC RUBBER, SYNTHETIC AND OTHER MAN-MADE FIBERS, EXCEPT GLASS—Continued****2824 Synthetic Organic Fibers, Except Cellulosic**

Establishments primarily engaged in manufacturing synthetic organic fibers, except cellulosic (including those of regenerated proteins, and of polymers or copolymers of such components as vinyl chloride, vinylidene chloride, linear esters, vinyl alcohols, acrylonitrile, ethylenes, amides, and related polymeric materials) in the form of mono-filament, yarn, staple or tow suitable for further manufacturing on spindles, looms, knitting machines or other textile processing equipment. Establishments primarily engaged in manufacturing textile glass fibers are classified in Industry 3229.

Acrylic fibers	Polyester fibers
Acrylonitrile fibers	Polyvinyl ester fibers
Anidex fibers	Polyvinylidene chloride fibers
Casein fibers	Protein fibers
Elastomeric fibers	Saran fibers
Fibers, man-made: except cellulosic	Soybean fibers (man-made textile materials)
Fluorocarbon fibers	Vinal fibers
Horsehair, artificial: nylon	Vinylidene chloride fibers
Linear esters fibers	Yarn, organic man-made fiber except cellulosic
Modacrylic fibers	Zeln fibers
Nylon fibers and bristles	
Olefin fibers	
Organic fibers, synthetic: except cellulosic	

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DRUGS

This group includes establishments primarily engaged in manufacturing, fabricating, or processing medicinal chemicals and pharmaceutical products. Also included in this group are establishments primarily engaged in the grading, grinding, and milling of botanicals.

2831 Biological Products

Establishments primarily engaged in the production of bacterial and virus vaccine, toxoids and analogous products (such as allergenic extracts), serums, plasmas, and other blood derivatives for human or veterinary use.

Agar culture media	Culture media or concentrates
Aggressins	Diagnostic agents, biological
Allergenic extracts	Diphtheria toxin
Allergens	Plasmas
Antigens	Pollen extracts
Anti-hog-cholera serum	Serobacterins
Antiserums	Serums
Antitoxins	Toxins
Antivenom	Toxoids
Bacterial vaccines	Tuberculin
Bacterins	Vaccines
Bacteriological media	Venoms
Biological and allied products: anti-toxins, bacterins, vaccines, viruses	Viruses
Blood derivatives, for human or veterinary use	

2833 Medicinal Chemicals and Botanical Products

Establishments primarily engaged in (1) manufacturing bulk organic and inorganic medicinal chemicals and their derivatives; and (2) processing (grading, grinding, and milling) bulk botanical drugs and herbs. Establishments primarily engaged in manufacturing agar-agar and similar products of natural origin, endocrine products, manufacturing or isolating basic vitamins, and isolating active medicinal principals such as alkaloids from botanical drugs and herbs are also included in this industry.

Adrenal derivatives: bulk, uncompounded	Atropine and derivatives
Agar-agar (ground)	Barbituric acid and derivatives: bulk, uncompounded
Alkaloids and salts	Botanical products, medicinal: ground, graded, and milled
Anesthetics, in bulk form	Brucine and derivatives
Antibiotics: bulk uncompounded	

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Group Industry
No. No.
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DRUGS—Continued

2333 Medicinal Chemicals and Botanical Products—Continued

Caffeine and derivatives
Chemicals, medicinal: organic and in-
organic—bulk, uncompounded
Cinchona and derivatives
Cocaine and derivatives
Codeine and derivatives
Digitoxin
Drug grading, grinding, and milling
Endocrine products
Ephedrine and derivatives
Ergot alkaloids
Fish liver oils, refined and concen-
trated for medicinal use
Gland derivatives: bulk, uncom-
pounded
Herb grinding, grading, and milling
Hormones and derivatives
Insulin: bulk, uncompounded
Kelp plants
Mercury chlorides, U.S.P.
Mercury compounds, medicinal: or-
ganic and inorganic
Morphine and derivatives
N-methylpiperazine

Oils, vegetable and animal: medicinal
grade—refined and concentrated
Opium derivatives
Ox bile salts and derivatives: bulk,
uncompounded
Penicillin: bulk, uncompounded
Physostigmine and derivatives
Pituitary gland derivatives: bulk, un-
compounded
Procaine and derivatives: bulk, un-
compounded
Quinine and derivatives
Reserpines
Salicylic acid derivatives, medicinal
grade
Strychnine and derivatives
Sulfa drugs
Sulfonamides
Theobromine
Vegetable gelatin (agar-agar)
Vegetable oils, medicinal grade: re-
fined and concentrated
Vitamins, natural and synthetic: bulk,
uncompounded

2334 Pharmaceutical Preparations

Establishments primarily engaged in manufacturing, fabricating, or processing drugs in pharmaceutical preparations for human or veterinary use. The greater part of the products of these establishments are finished in the form intended for final consumption, such as ampuls, tablets, capsules, vials, ointments, medicinal powders, solutions, and suspensions. Products of this industry consist of two important lines, namely: (1) pharmaceutical preparations promoted primarily to the dental, medical, or veterinary professions; and (2) pharmaceutical preparations promoted primarily to the public.

Adrenal pharmaceutical preparations
Analgesics
Anesthetics, packaged
Antacids
Anthelmintics
Antibiotics, packaged
Antihistamine preparations
Antipyretics
Antiseptics, medicinal
Astringents, medicinal
Barbituric acid pharmaceutical prepa-
rations
Belladonna pharmaceutical prepara-
tions
Botanical extracts: powdered, pillular,
solid, and fluid
Chapsticks
Chlorination tablets and kits (water
purification)
Cold remedies
Cough medicines
Cyclopropane for anesthetic use (U.S.P.
par N.F.), packaged
Dextrose and sodium chloride injection,
mixed
Dextrose injection
Digitalis pharmaceutical preparations
Diuretics
Druggists' preparations (pharmaceuti-
cals)
Effervescent salts
Emulsifiers, fluorescent inspection
Emulsions, pharmaceutical
Ether for anesthetic use
Fever remedies
Galenic preparations
Hormone preparations
Insulin preparations
Intravenous solutions

Iodine, tincture of
Laxatives
Liniments
Lozenges, pharmaceutical
Medicines, capsule or ampouled
Nitrofurazone preparations
Nitrous oxide for anesthetic use
Ointments
Parenteral solutions
Penicillin preparations
Pharmaceuticals
Pills, pharmaceutical
Pituitary gland pharmaceutical prepa-
rations
Poultry and animal remedies
Powders, pharmaceutical
Procaine pharmaceutical preparations
Proprietary drug products
Remedies, human and animal
Syrups, pharmaceutical
Sodium chloride solution for injection,
U.S.P.
Sodium salicylate tablets
Solutions, pharmaceutical
Spirits, pharmaceutical
Suppositories
Tablets, pharmaceutical
Thyroid preparations
Tinctures, pharmaceutical
Tranquilizers and mental drug prepa-
rations
Vermifuges
Veterinary pharmaceutical prepara-
tions
Vitamin preparations
Water decontamination or purification
tablets
Water, sterile: for injections
Zinc ointment

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**284 SOAP, DETERGENTS, AND CLEANING PREPARATIONS, PERFUMES, COSMETICS, AND OTHER TOILET PREPARATIONS**

This group includes establishments primarily engaged in manufacturing soap and other detergents and in producing glycerin from vegetable and animal fats and oils; specialty cleaning, polishing, and sanitation preparations; and surface active preparations used as emulsifiers, wetting agents, and finishing agents, including sulfonated oils; and perfumes, cosmetics, and other toilet preparations.

2841 Soap and Other Detergents, Except Specialty Cleaners

Establishments primarily engaged in manufacturing soap, synthetic organic detergents, inorganic alkaline detergents, or any combination thereof, and establishments producing crude and refined glycerin from vegetable and animal fats and oils. Establishments primarily engaged in manufacturing shampoos or shaving products, whether from soap or synthetic detergents, are classified in Industry 2844; and synthetic glycerin in Industry 2869.

Detergents, synthetic organic and inorganic alkaline
Dye removing cream, soap base
Foots soap
Glycerin, crude and refined: from fats—except synthetic

Mechanics' paste
Scouring compounds
Soap: granulated, liquid, cake, flaked, and chip
Textile soap
Washing compounds

2842 Specialty Cleaning, Polishing, and Sanitation Preparations

Establishments primarily engaged in manufacturing furniture, metal, and other polishes; waxes and dressings for fabricated leather and other materials; household, institutional and industrial plant disinfectants, deodorants; dry cleaning preparations; household bleaches; and other sanitation preparations. Establishments primarily manufacturing household pesticidal preparations are classified in Industry 2879.

Ammonia, household
Aqua ammonia, household
Beeswax, processing of
Belt dressing
Blackings
Bleaches, household: liquid or dry
Burnishing ink
Chlorine bleaching compounds, household: liquid or dry
Cleaning and polishing preparations
Cloths, dusting and polishing: chemically treated
Degreasing solvent
Deodorants, nonpersonal
Disinfectants, household and industrial plant
Drain pipe solvents and cleaners
Dressings for fabricated leather and other materials
Dry cleaning preparations
Dust mats, gelatin
Dusting cloths, chemically treated
Dye removing cream, petroleum base
Floor wax emulsion
Floor waxes
Furniture polish and wax
Harness dressing

Household bleaches, dry or liquid
Industrial plant disinfectants and deodorants
Ink, burnishing
Ink eradicators
Leather dressings and finishes
Lye, household
Paint and wallpaper cleaners
Polishes: furniture, automobile, metal, shoe, and stove
Polishing and cleaning preparations
Re-refining dry-cleaning fluid
Rug, upholstery, and dry cleaning detergents and spotters
Rust removers
Saddle soap
Sanitation preparations
Shoe cleaners and polishes
Sodium hypochlorite
Stain removers
Starches, plastic
Sweeping compounds, oil and water absorbent, clay or sawdust
Wallpaper cleaners
Wax removers
Waxes for wood, fabricated leather, and other materials

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Group Industry
No. No.

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SOAP, DETERGENTS, AND CLEANING PREPARATIONS, PERFUMES, COSMETICS, AND OTHER TOILET PREPARATIONS—Continued**2843 Surface Active Agents, Finishing Agents, Sulfonated Oils and Assistants**

Establishments primarily engaged in producing surface active preparations for use as wetting agents, emulsifiers, and penetrants. Establishments engaged in producing sulfonated oils and fats and related products are also included.

Assistants, textile and leather processing
Calcium salts of sulfonated oils, fats, or greases
Cod oil, sulfonated
Emulsifiers, except food and pharmaceutical
Finishing agents, textile and leather
Leather finishing agents
Mordants
Oil, turkey red
Oils, soluble (textile assistants)

Penetrants
Sodium salts of sulfonated oils, fats, or greases
Softeners (textile assistants)
Soluble oils and greases
Sulfonated oils, fats and greases
Surface active agents
Textile processing assistants
Textile scouring compounds and wetting agents
Thin water (admixture)

2844 Perfumes, Cosmetics, and Other Toilet Preparations

Establishments primarily engaged in manufacturing perfumes (natural and synthetic), cosmetics, and other toilet preparations. This industry also includes establishments primarily engaged in blending and compounding perfume bases; and those manufacturing shampoos and shaving products, whether from soap or synthetic detergents. Establishments primarily engaged in manufacturing synthetic perfume and flavoring materials are classified in Industry 2869, and essential oils in Industry 2899.

Bath salts
Bay rum
Body powder
Colognes
Concentrates, perfume
Cosmetic creams
Cosmetic lotions and oils
Cosmetics
Cupranol
Dentifrices
Denture cleaners
Deodorants, personal
Depilatories (cosmetic)
Dressings, cosmetic
Face creams and lotions
Face powders
Home permanent kits

Lipsticks
Manicure preparations
Mouth washes
Perfume bases, blending and compounding
Perfumes, natural and synthetic
Powder: baby, face, talcum, and toilet
Rouge, cosmetic
Sachet
Shampoos
Shaving preparations: cakes, creams, lotions, powders, tablets, etc.
Talcum powders
Toilet creams, powders, and waters
Toilet preparations
Tooth pastes and powders
Washes, cosmetic

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PAINTS, VARNISHES, LACQUERS, ENAMELS, AND ALLIED PRODUCTS**2851 Paints, Varnishes, Lacquers, Enamels, and Allied Products**

Establishments primarily engaged in manufacturing paints (in paste and ready mixed form); varnishes; lacquers; enamels and shellac; putties, wood fillers and sealers; paint and varnish removers; paint brush cleaners and allied paint products. Establishments primarily engaged in manufacturing carbon black are classified in Industry 2895; bone black, lamp black, and inorganic color pigments in Industry 2816; organic color pigments in Industry 2865; plastics materials in Industry 2821; printing ink in Industry 2893; calking compounds and sealants in Industry 2891; and artists' paints in Industry 3952.

Calcimines, dry and paste
Cleaners, paint brush
Coating, air curing
Colors in oil, except artists'
Dispersions, thermoplastic and colloidal: paint
Dopes (paint)
Driers, paint
Enamels, except dental and china painting
Epoxy coatings, made from purchased resin
Fillers, wood: dry, liquid, and paste
Intaglio ink vehicle
Japan, baking and drying

Kalsomines, dry or paste
Lacquer bases and dopes
Lacquer, clear and pigmented
Lacquer thinner
Lacquers, plastic
Lead-in-oil paints
Linoleates (paint driers)
Lithographic varnishes
Marine paints
Naphthanate driers
Oleate driers
Paint brush cleaners
Paint driers
Paint removers
Paints, asphalt and bituminous

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**285 PAINTS, VARNISHES, LACQUERS, ENAMELS, AND ALLIED PRODUCTS—Con.****2851 Paints, Varnishes, Lacquers, Enamels, and Allied Products—Continued**

Paints: oil and alkyd vehicle, and water thinned	Soyate driers
Paints, plastic texture: paste and dry	Stains: varnish, oil, and wax
Paints, waterproof	Tallate driers
Phenol formaldehyde coatings, baking and air curing	Undercoatings, paint
Plastics base paints and varnishes	Varnish removers
Plastisol coating compound	Varnishes
Polyurethane coatings	Vinyl coatings, strippable
Primers, paint	Vinyl plastisol
Putty	Water paints
Resinate driers	Wood fillers and sealers
Shellac (protective coating)	Wood stains
	Zinc oxide in oil (paint)

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INDUSTRIAL ORGANIC CHEMICALS

Establishments primarily engaged in manufacturing industrial organic chemicals. Important products of this group include: (1) non-cyclic organic chemicals such as acetic, chloroacetic, adipic, formic, oxalic and tartaric acids and their metallic salts; chloral, formaldehyde and methylamine; (2) solvents such as amyl, butyl, and ethyl alcohols; methanol; amyl, butyl and ethyl acetates; ethyl ether, ethylene glycol ether and diethylene glycol ether; acetone, carbon disulfide and chlorinated solvents such as carbon tetrachloride, perchloroethylene and trichloroethylene; (3) polyhydric alcohols such as ethylene glycol, sorbitol, pentaerythritol, synthetic glycerin; (4) synthetic perfume and flavoring materials such as coumarin, methyl salicylate, saccharin, citral, citronellal, synthetic geraniol, ionone, terpineol, and synthetic vanillin; (5) rubber processing chemicals such as accelerators and antioxidants, both cyclic and acyclic; (6) plasticizers, both cyclic and acyclic, such as esters of phosphoric acid, phthalic anhydride, adipic acid, lauric acid, oleic acid, sebacic acid, and stearic acid; (7) synthetic tanning agents such as naphthalene sulfonic acid condensates; (8) chemical warfare gases; (9) esters, amines, etc. of polyhydric alcohols and fatty and other acids; (10) cyclic crudes and intermediates; (11) cyclic dyes and organic pigments; and (12) natural gum and wood chemicals. Establishments primarily engaged in manufacturing plastics materials and nonvulcanizable elastomers are classified in Industry 2821; synthetic rubber in Industry 2822; essential oils in Industry 2899; rayon and other synthetic fibers in Industries 2823 and 2824; specialty cleaning, polishing and sanitation preparations in Industry 2842; paints in Industry 2851; and inorganic pigments in Industry 2816. Distilleries engaged in the manufacture of grain alcohol for beverage purposes are classified in Industry 2085.

2861 Gum and Wood Chemicals

Establishments primarily engaged in manufacturing hardwood and softwood distillation products, wood and gum naval stores, charcoal, natural dyestuffs, and natural tanning materials. Establishments primarily engaged in manufacturing synthetic tanning materials and synthetic organic chemicals are classified in Industry 2869, and synthetic organic dyes in Industry 2865.

Acetate of lime, natural	Fuatic wood extract
Acetone, natural	Gambier extract
Annatto extract	Gum naval stores, processing but not gathering or warehousing
Brasilwood extract	Hardwood distillates
Brewers' pitch, product of softwood distillation	Hemlock extract
Calcium acetate, product of hardwood distillation	Logwood extract
Charcoal, except activated	Mangrove extract
Chestnut extract	Methanol, natural (wood alcohol)
Dragon's blood	Methyl acetone
Dyeing materials, natural	Methyl alcohol, natural (wood alcohol)
Dyestuffs, natural	Myrobalans extract
Ethyl acetate, natural	Naval stores, gum: processing but not gathering or warehousing
Extracts, dyeing and tanning: natural	Naval stores, wood

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Group Industry
No. No.

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INDUSTRIAL ORGANIC CHEMICALS—Continued

2861 Gum and Wood Chemicals—Continued

Oak extract	Softwood distillates
Oil, pine: produced by distillation of pine gum or pine wood	Sumac extract
Oils, wood: product of hardwood distillation	Tall oil, except skimmings
Pine oil, produced by distillation of pine gum or pine wood	Tanning extracts and materials, natural
Pit charcoal	Tar and tar oils, products of wood distillation
Pitch, wood	Turpentine, produced by distillation of pine gum or pine wood
Pyroligneous acid	Valonia extract
Quebracho extract	Wattle extract
Quercitron extract	Wood alcohol, natural
Resin, produced by distillation of pine gum or pine wood	Wood creosote
	Wood distillates

2865 Cyclic (Coal Tar) Crudes, and Cyclic Intermediates, Dyes, and Organic Pigments (Lakes and Toners)

Establishments primarily engaged in manufacturing coal tar crudes and cyclic organic intermediates, dyes, color lakes and toners. Important products of this industry include: (1) derivatives of benzene, toluene, naphthalene, anthracene, pyridine, carbazole, and other cyclic chemical products; (2) synthetic organic dyes; (3) synthetic organic pigments; and (4) cyclic (coal tar) crudes, such as light oils and light oil products; coal tar acids; and products of medium and heavy oil such as creosote oil, naphthalene, anthracene, and their higher homologues, and tar. Establishments primarily engaged in manufacturing coal tar crudes in chemical recovery ovens are classified in Industry 3312, and petroleum refineries which produce such products in Industry 2911.

Acid dyes, synthetic	Cyclohexane
Acids, coal tar: derived from coal tar distillation	Diphenylamine
Alkylated diphenylamines, mixed	Drug dyes, synthetic
Alkylated phenol, mixed	Dye (cyclic) intermediates
Aminoanthraquinone	Dyes, food: synthetic
Aminobenzene	Dyes, synthetic organic
Aminoazobenzene	Eosine toners
Aminotoluene	Ethylbenzene
Aminophenol	Hydroquinone
Aniline	Isocyanates
Aniline oil	Lake red C toners
Anthracene	Leather dyes and stains, synthetic
Anthraquinone dyes	Lithol rubine lakes and toners
Asine dyes	Maleic anhydride
Azo dyes	Methyl violet toners
Azobenzene	Naphtha, solvent: product of coal tar distillation
Azoic dyes	Naphthalene chips and flakes
Benzaldehyde	Naphthalene, product of coal tar distillation
Ben-ene hexachloride (BHC)	Naphthol, alpha and beta
Benzene, product of coal tar distillation	Nitro dyes
Benzoic acid	Nitroaniline
Benzol, product of coal tar distillation	Nitrobenzene
Biological stains	Nitrophenol
Chemical indicators	Nitroso dyes
Chlorobenzene	Oil, aniline
Chloronaphthalene	Oils: light, medium, and heavy—product of coal tar distillation
Chlorophenol	Organic pigments (lakes and toners)
Chlorotoluene	Orthodichlorobenzene
Coal tar crudes, derived from coal tar distillation	Paint pigments, organic
Coal tar distillates	Peacock blue lake
Coal tar intermediates	Pentachlorophenol
Color lakes and toners	Persian orange lake
Color pigments, organic: except animal black and bone black	Phenol
Colors, dry: lakes, toners, or full strength organic colors	Phloxine toners
Colors, extended (color lakes)	Phosphomolybdic acid lakes and toners
Cosmetic dyes, synthetic	Phosphotungstic acid lakes and toners
Creosote oil, product of coal tar distillation	Phthalic anhydride
Cresols, product of coal tar distillation	Phthalocyanine toners
Cresylic acid, product of coal tar distillation	Pigment scarlet lake
Cyclic crudes, coal tar: product of coal tar distillation	Pitch, product of coal tar distillation
Cyclic intermediates	Pulp colors, organic
	Quinoline dyes
	Resorcinol
	Scarlet 2 B lake

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

286 INDUSTRIAL ORGANIC CHEMICALS—Continued

2865 Cyclic (Coal Tar) Crudes, and Cyclic Intermediates, Dyes, and Organic Pigments (Lakes and Toners)—Continued

Stains for leather
Stilbene dyes
Styrene
Styrene monomer
Tar, product of coal tar distillation
Toluene, product of coal tar distillation

Toluidines
Toluol, product of coal tar distillation
Vat dyes, synthetic
Xylene, product of coal tar distillation
Xylol, product of coal tar distillation

2869 Industrial Organic Chemicals, Not Elsewhere Classified

Establishments primarily engaged in manufacturing industrial organic chemicals, not elsewhere classified. Important products of this industry include: (1) non-cyclic organic chemicals such as acetic, chloroacetic, adipic, formic, oxalic and tartaric acids and their metallic salts; chloral, formaldehyde and methylamine; (2) solvents such as amyl, butyl, and ethyl alcohols; methanol; amyl, butyl and ethyl acetates; ethyl ether, ethylene glycol ether and diethylene glycol ether; acetone, carbon disulfide and chlorinated solvents such as carbon tetrachloride, perchloroethylene and trichloroethylene; (3) polyhydric alcohols such as ethylene glycol, sorbitol, pentaerythritol, synthetic glycerin; (4) synthetic perfume and flavoring materials such as coumarin, methyl salicylate, saccharin, citral, citronellal, synthetic geraniol, ionone, terpineol, and synthetic vanillin; (5) rubber processing chemicals such as accelerators and antioxidants, both cyclic and acyclic; (6) plasticizers, both cyclic and acyclic, such as esters of phosphoric acid, phthalic anhydride, adipic acid, lauric acid, oleic acid, sebacic acid, and stearic acid; (7) synthetic tanning agents such as naphthalene sulfonic acid condensates; (8) chemical warfare gases; and (9) esters, amines, etc. of polyhydric alcohols and fatty and other acids. Establishments primarily engaged in manufacturing plastics materials and nonvulcanizable elastomers are classified in Industry 2821; synthetic rubber in Industry 2822; essential oils in Industry 2899; wood distillation products, naval stores, and natural dyeing and tanning materials in Industry 2861; rayon and other synthetic fibers in Industries 2823 and 2824; specialty cleaning, polishing and sanitation preparations in Industry 2842; paints in Industry 2851; urea in Industry 2873; organic pigments in Industry 2865; and inorganic pigments in Industry 2816. Distilleries engaged in the manufacture of grain alcohol for beverage purposes are classified in Industry 2085.

Accelerators, rubber processing: cyclic and acyclic
Acetaldehyde
Acetates, except natural acetate of lime
Acetic acid, synthetic
Acetic anhydride
Acetin
Acetone, synthetic
Acid esters, amines, etc.
Acids, organic
Acrolein
Acrylonitrile
Adipic acid
Adipic acid esters
Adiponitrile
Alcohol, aromatic
Alcohol, fatty: powdered
Alcohol, methyl: synthetic (methanol)
Alcohols, industrial: denatured (non-beverage)
Algin products
Amyl acetate and alcohol
Antioxidants, rubber processing: cyclic and acyclic
Bromochloromethane
Butadiene, from alcohol
Butyl acetate, alcohol, and propionate
Butyl ester solution of 2, 4-D

Calcium oxalate
Camphor, synthetic
Carbon bisulfide (disulfide)
Carbon tetrachloride
Casing fluids, for curing fruits, spices, tobacco, etc.
Cellulose acetate, unplasticized
Chemical warfare gases
Chloral
Chlorinated solvents
Chloroacetic acid and metallic salts
Chloroform
Chloropicrin
Citral
Citrates
Citric acid
Citronellal
Coumarin
Cream of tartar
Cyclopropane
DDT, technical
Decahydronaphthalene
Dichlorodifluoromethane
Diethylcyclohexane (mixed isomers)
Diethylene glycol ether
Dimethyl divinyl acetylene (di-isopropenyl acetylene)
Dimethylhydrazine, unsymmetrical
Embalming fluids

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INDUSTRIAL ORGANIC CHEMICALS—Continued

2869 Industrial Organic Chemicals, Not Elsewhere Classified—Continued

Enzymes
 Esters of phosphoric, adipic, lauric, oleic, sebacic, and stearic acids
 Esters of phthalic anhydride
 Ethanol, industrial
 Ether
 Ethyl acetate, synthetic
 Ethyl alcohol, industrial (non-beverage)
 Ethyl butyrate
 Ethyl cellulose, unplasticized
 Ethyl chloride
 Ethyl ether
 Ethyl formate
 Ethyl nitrite
 Ethyl perhydrophenanthrene
 Ethylene
 Ethylene glycol
 Ethylene glycol ether
 Ethylene glycol, inhibited
 Ethylene oxide
 Fatty acid esters, amines, etc.
 Ferric ammonium oxalate
 Flavors and flavoring materials, synthetic
 Fluorinated hydrocarbon gases
 Formaldehyde (formalin)
 Formic acid and metallic salts
 Freon
 Fuel propellants, solid : organic
 Fuels, high energy : organic
 Geraniol, synthetic
 Glycerin, except from fats (synthetic)
 Grain alcohol, industrial (nonbeverage)
 Hexamethylenediamine
 Hexamethylenetetramine
 High purity grade chemicals, organic : refined from technical grades
 Hydraulic fluids, synthetic base
 Hydrazine
 Industrial organic cyclic compounds
 Ionone
 Isopropyl alcohol
 Ketone, methyl ethyl
 Ketone, methyl isobutyl
 Laboratory chemicals, organic
 Lauric acid esters
 Lime citrate
 Malononitrile, technical grade
 Metallic salts of acyclic organic chemicals
 Metallic stearate
 Methanol, synthetic (methyl alcohol)
 Methyl chloride
 Methyl perhydrofluorine
 Methyl salicylate
 Methylamine
 Methylene chloride
 Monochlorodifluoromethane
 Monomethylp-aminophenol sulfate
 Monosodium glutamate
 Mustard gas
 Naphthalene sulfonic acid condensates
 Naphthenic acid soaps
 Normal hexyl decalin
 Nuclear fuels, organic
 Oleic acid esters
 Organic acid esters
 Organic chemicals, acyclic
 Oxalates
 Oxalic acid and metallic salts
 Pentaerythritol
 Perchloroethylene
 Perfume materials, synthetic
 Phosgene
 Phthalates
 Plasticizers, organic : cyclic and acyclic
 Polyhydric alcohol esters, amines, etc.
 Polyhydric alcohols
 Potassium bitartrate
 Propellants for missiles, solid : organic
 Propylene
 Propylene glycol
 Quinuclidinol ester of benzylic acid
 Reagent grade chemicals, organic : refined from technical grades
 Rocket engine fuel, organic
 Rubber processing chemicals, organic : accelerators and antioxidants
 Saccharin
 Sebacic acid
 Silicones
 Soaps, naphthenic acid
 Sodium acetate
 Sodium alginate
 Sodium benzoate
 Sodium glutamate
 Sodium pentachlorophenate
 Sodium sulfoxalate formaldehyde
 Solvents, organic
 Sorbitol
 Stearic acid salts
 Sulfonated naphthalene
 Tackifiers, organic
 Tannic acid
 Tanning agents, synthetic organic
 Tartaric acid and metallic salts
 Tartrates
 Tear gas
 Terpineol
 Tert-butylated bis (p-phenoxyphenyl) ether fluid
 Tetrachloroethylene
 Tetraethyl lead
 Thioglycolic acid, for permanent wave lotions
 Trichloroethylene
 Trichloroethylene stabilized, degreasing
 Trichlorophenoxyacetic acid
 Trichlorotrifluoroethane tetrachlorodifluoroethane isopropyl alcohol
 Tricresyl phosphate
 Tridecyl alcohol
 Trimethyltrithiophosphite (rocket propellants)
 Triphenyl phosphate
 Vanillin, synthetic
 Vinyl acetate

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AGRICULTURAL CHEMICALS

This group includes establishments primarily engaged in manufacturing nitrogenous and phosphatic basic fertilizers, mixed fertilizers, pesticides, and other agricultural chemicals. Establishments primarily engaged in manufacturing basic chemicals, which require further processing or formulation before use as agricultural pest control agents, are classified in Group 281 or 286.

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STANDARD INDUSTRIAL CLASSIFICATION

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287 AGRICULTURAL CHEMICALS—Continued

2873 Nitrogenous Fertilizers

Establishments primarily engaged in manufacturing nitrogenous fertilizer materials or mixed fertilizers from nitrogenous materials produced in the same establishment. Included are ammonia fertilizer compounds and anhydrous ammonia, nitric acid, ammonium nitrate, ammonium sulfate and nitrogen solutions, urea, and natural organic fertilizers (except compost) and mixtures.

Ammonia liquor
Ammonium nitrate and sulfate
Anhydrous ammonia
Aqua ammonia, made in ammonia plants
Fertilizers: natural (organic), except compost

Nitric acid
Nitrogen solutions (fertilizer)
Plant foods, mixed: made in plants producing nitrogenous fertilizer
Urea

2874 Phosphatic Fertilizers

Establishments primarily engaged in manufacturing phosphatic fertilizer materials, or mixed fertilizers from phosphatic materials produced in the same establishment. Included are phosphoric acid; normal, enriched, and concentrated superphosphates; ammonium phosphates; nitro-phosphates; and calcium meta-phosphates.

Ammonium phosphate
Calcium meta-phosphate
Defluorinated phosphate
Diammonium phosphate
Fertilizers, mixed: made in plants producing phosphatic fertilizer materials

Phosphoric acid
Plant foods, mixed: made in plants producing phosphatic fertilizer
Superphosphates, ammoniated and not ammoniated

2875 Fertilizers, Mixing Only

Establishments primarily engaged in mixing fertilizers from purchased fertilizer materials.

Compost
Fertilizers, mixed: made in plants not manufacturing fertilizer materials

Potting soil, mixed

2879 Pesticides and Agricultural Chemicals, Not Elsewhere Classified

Establishments primarily engaged in the formulation and preparation of ready-to-use agricultural and household pest control chemicals, including insecticides, fungicides and herbicides from technical chemicals or concentrates; and the production of concentrates which require further processing before use as agricultural pesticides. This industry also includes establishments primarily engaged in manufacturing or formulating agricultural chemicals, not elsewhere classified, such as minor or trace elements and soil conditioners. Establishments primarily engaged in manufacturing basic or technical agricultural pest control chemicals including insecticides, fungicides, and herbicides such as lead and calcium arsenates, and copper sulfate are classified in Group 281, and DDT, BHC, 2,4-D carbamates, etc., in Group 286. Establishments primarily engaged in manufacturing agricultural lime products are classified in Major Group 32.

Agricultural disinfectants
Agricultural pesticides
Arsenates: calcium, copper, and lead—formulated
Arsenites, formulated
Bordeaux mixture
Calcium arsenate and arsenite, formulated
Cattle dips
Copper arsenate, formulated
DDT (insecticide), formulated
Defoliants
Elements, minor or trace (agricultural chemicals)
Exterminating products, for household and industrial use
Fly sprays
Fungicides
Growth regulators, agricultural
Herbicides

Hormones, plant
Household insecticides
Insect powder, household
Insecticides, agricultural
Lead arsenate, formulated
Lime-sulfur, dry and solution
Lindane, formulated
Moth repellants
Nicotine and salts
Nicotine bearing insecticides
Paris green (insecticide)
Pesticides, household
Phytoactin
Plant hormones
Poison: ant, rat, roach, and rodent—household
Pyrethrin bearing preparations
Pyrethrin concentrates
Rodenticides
Rotenone bearing preparations

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Group
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No.**287 AGRICULTURAL CHEMICALS—Continued****2879 Pesticides and Agricultural Chemicals, Not Elsewhere Classified—Continued**

Rotenone concentrates
Sheep dips, chemical
Sodium arsenite (formulated)
Soil conditioners
Sulfur dust (insecticide)

Thiocyanates, organic (formulated)
Trace elements (agricultural chemicals)
Xanthone (formulated)

289**MISCELLANEOUS CHEMICAL PRODUCTS****2891 Adhesives and Sealants**

Establishments primarily engaged in manufacturing industrial and household adhesives, glues, calking compounds, sealants, and linoleum, tile, and rubber cements from vegetable, animal, or synthetic plastics materials, purchased or produced in the same establishment. Establishments primarily engaged in manufacturing gelatin and sizes are classified in Industry 2899, and vegetable gelatin or agar-agar in Industry 2833.

Adhesives
Adhesives, plastic
Calking compounds
Cement (cellulose nitrate base)
Cement, linoleum
Cement, mending
Cement, rubber
Epoxy adhesives
Glue, except dental: animal, vegetable, fish, casein, and synthetic resin
Iron cement, household

Laminating compounds
Mucilage
Paste, adhesive
Porcelain cement, household
Rubber cement
Sealing compounds for pipe threads and joints
Sealing compounds, synthetic rubber and plastic
Wax, sealing

2892 Explosives

Establishments primarily engaged in manufacturing explosives. Establishments primarily engaged in manufacturing ammunition for small arms are classified in Industry 3482 and fireworks in Industry 2899.

Amatol (explosive)
Azides (explosives)
Blasting powder and blasting caps
Carbohydrates, nitrated (explosives)
Cordeau detonant (explosive)
Cordite (explosive)
Detonating caps for safety fuses
Detonators (explosive compounds)
Dynamite
Explosive cartridges for concussion forming of metal
Explosive compounds
Explosives
Fulminate of mercury (explosive compound)
Fuse powder
Fuses, safety
Gunpowder
High explosives

Lead azide (explosive)
Mercury azide (explosive)
Nitrocellulose powder (explosive)
Nitroglycerin (explosive)
Nitromannitol (explosive)
Nitrostarch (explosive)
Nitrosugars (explosives)
Pentolite (explosive)
Permissible explosives
Picric acid (explosive)
Powder: pellet, smokeless, and sporting (explosive)
RDX (explosive)
Squibbs, electric
Styphnic acid
Tetryl (explosive)
TNT (trinitrotoluene)
Well shooting torpedoes (explosives)

2893 Printing Ink

Establishments primarily engaged in manufacturing printing ink, gravure ink, screen process ink, and lithographic ink.

Bronze ink
Gold ink
Gravure ink
Ink, duplicating

Ink, printing: base or finished
Lithographic ink
Printing ink
Screen process ink

2895 Carbon Black

Establishments primarily engaged in manufacturing carbon black (channel and furnace black).

Carbon black
Channel black

Furnace black

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MISCELLANEOUS CHEMICAL PRODUCTS—Continued

2899 Chemicals and Chemical Preparations, Not Elsewhere Classified

Establishments primarily engaged in manufacturing miscellaneous chemical preparations, not elsewhere classified, such as fatty acids, essential oils, gelatin (except vegetable), sizes, bluing, laundry soaps, writing and stamp pad inks; industrial compounds, such as boiler and heat insulating compounds, metal, oil and water treating compounds, water-proofing compounds and chemical supplies for foundries. Establishments primarily engaged in manufacturing vegetable gelatin (agar-agar) are classified in Industry 2833; and dessert preparations based on gelatin in Industry 2099.

Acid, battery	Heat treating salts
Acid resist for etching	Hydrofluoric acid compound, for etching and polishing glass
Anise oil	Igniter grains, boron potassium nitrate
Antifreeze compounds, except industrial alcohol	Incense
Bay oil	Industrial sizes
Binders (chemical foundry supplies)	Ink and writing fluids, except printing
Bluing	Inspection oil, fluorescent
Boiler compounds, antiscaling	Insulating compounds
Bombs, flashlight	Jet fuel igniters
Caps, for toy pistols	Laundry soaps
Carbon removing solvent	Lemon oil
Chemical cotton (processed cotton linters)	Lighter fluid
Chemical supplies for foundries	Magnetic inspection oil and powder
Citronella oil	Margaric acid
Concrete curing compounds (blends of pigments, waxes, and resins)	Metal drawing compound lubricants
Concrete hardening compounds	Metal treating compounds
Core oil and binders	Military pyrotechnics
Core wash	Napalm
Core wax	Oil, red (oleic acid)
Corrosion preventive lubricant, synthetic base: for jet engines	Oil treating compounds
Defrosting fluid	Oleic acid (red oil)
De-icing fluid	Orange oil
Dextrine sizes	Orris oil
Desalter kits, sea water	Oseain
Drilling mud	Oxidizers, inorganic
Dyes, household	Packers' salt
Essential oils	Parting compounds (chemical foundry supplies)
Eucalyptus oil	Patching plaster, household
Exothermics for metal industries	Penetrants, inspection
Facings (chemical foundry supplies)	Peppermint oil
Fatty acids: margaric, oleic, and stearic	Plastic wood
Fire extinguisher chargers	Plating compounds
Fire retardant chemicals	Pyrotechnic ammunition: flares, signals, flashlight bombs, and rockets
Fireworks	Railroad torpedoes
Flares (all kinds)	Red oil (oleic acid)
Fluidifier (retarder) for concrete	Rifle bore cleaning compounds
Fluorescent inspection oil	Rosin sizes
Fluxes: brazing, soldering, galvanizing, and welding	Rust resisting compounds
Foam charge mixtures	Salt
Food contamination testing and screening kits	Signal flares, marine
Foundry supplies	Sizes: animal, vegetable, and synthetic plastics materials
Frit	Sodium chloride, refined
Fuel tank and engine cleaning chemicals, automotive and aircraft	Soil testing kits
Fuses: highway, marine, and railroad	Spearmint oil
Gelatin capsules, empty	Spirit duplicating fluid
Gelatin: edible, technical, photographic, and pharmaceutical	Stearic acid
Glue size	Stencil correction compounds
Gum sizes	Tints and dyes, household
Grapefruit oil	Torches (fireworks)
Grouting material (concrete mending compound)	Torpedoes, railroad
Gun slushing compounds	Vegetable oils, vulcanized or sulfurized
Heat insulating compounds	Water, distilled
	Water treating compounds
	Waterproofing compounds
	Wax, core
	Wintergreen oil
	Writing ink and fluids

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Major Group 29.—PETROLEUM REFINING AND RELATED INDUSTRIES*The Major Group as a Whole*

This major group includes establishments primarily engaged in petroleum refining, manufacturing paving and roofing materials, and compounding lubricating oils and greases from purchased materials. Establishments manufacturing and distributing gas to consumers are classified in public utilities industries, and those primarily engaged in producing coke and byproducts in Major Group 33.

Group Industry
No. No.

291 PETROLEUM REFINING**2911 Petroleum Refining**

Establishments primarily engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants and other products from crude petroleum and its fractionation products, through straight distillation of crude oil, redistillation of unfinished petroleum derivatives, cracking or other processes. Establishments primarily engaged in producing natural gasoline from natural gas are classified in mining industries. Those manufacturing lubricating oils and greases by blending and compounding purchased materials are included in Industry 2992. Establishments primarily re-refining used lubricating oils are classified in Industry 2992.

Acid oil
Alkylates
Aromatic chemicals, made in petroleum refineries
Asphalt and asphaltic materials: liquid and solid—produced in refineries
Benzene, produced in petroleum refineries
Benzol, produced in petroleum refineries
Butadiene, from petroleum
Coke, petroleum: produced in petroleum refineries
Fractionation products of crude petroleum
Gas, refinery or still oil: produced in petroleum refineries
Gases, liquefied petroleum
Gasoline blending plants
Gasoline, except natural gasoline
Greases: lubricating, produced in petroleum refineries
Hydrocarbon fluid, made in petroleum refineries
Jet fuels

Kerosene
Mineral jelly, produced in petroleum refineries
Mineral oils, natural
Mineral waxes, natural
Naphtha, produced in petroleum refineries
Naphthenic acids
Oils: fuel, lubricating, and illuminating—produced in petroleum refineries
Oils, partly refined: sold for rerunning—produced in refineries
Paraffin wax, produced in petroleum refineries
Petrolatums, nonmedicinal
Petroleum refining
Road materials, bituminous: produced in petroleum refineries
Road oils, produced in petroleum refineries
Solvents, produced in petroleum refineries
Tar or residuum, produced in petroleum refineries

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PAVING AND ROOFING MATERIALS**2951 Paving Mixtures and Blocks**

Establishments primarily engaged in manufacturing asphalt and tar paving mixtures; and paving blocks made of asphalt, creosoted wood, and various compositions of asphalt or tar with other materials. Establishments primarily engaged in manufacturing brick, concrete, granite, and stone paving blocks are classified in Major Group 32.

Asphalt and asphaltic mixtures for paving, not made in refineries
Asphalt paving blocks, not made in petroleum refineries
Asphaltic concrete, not made in petroleum refineries
Coal tar paving materials, not made in petroleum refineries

Composition blocks for paving
Concrete, bituminous
Creosoted wood paving blocks
Mastic floor composition, hot and cold
Road materials, bituminous: not made in petroleum refineries
Tar and asphalt mixtures for paving, not made in petroleum refineries

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STANDARD INDUSTRIAL CLASSIFICATION

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PAVING AND ROOFING MATERIALS—Continued

2052 Asphalt Felts and Coatings

Establishments primarily engaged in manufacturing asphalt and other saturated felts in roll or shingle form, either smooth or faced with grit, and in manufacturing roofing cements and coatings. Establishments primarily engaged in manufacturing paint are classified in Industry 2851, and linoleum and tile cement in Industry 2891.

Asphalt saturated board, made from purchased materials
Asphalt roof cement, not made in petroleum refineries
Brick siding, asphalt
Cement, roofing: asphalt, fibrous plastic
Coating compounds, tar
Fabrics, roofing: asphalt or tar saturated
Insulating siding, impregnated: made from purchased materials
Mastic roofing composition
Pitch, roofing: not made in byproduct coke ovens or petroleum refineries
Roof cement: asphalt, fibrous, and plastic

Roof coatings and cements: fibrous and nonfibrous, liquid and plastic
Roofing, asphalt or tar saturated felt: built-up, roll, and shingle
Roofing felts, cements, and coatings: asphalt, tar, and composition
Sheathing, asphalt saturated: made from purchased materials
Shingles, asphalt or tar saturated felt: strip and individual
Sliding, insulating: impregnated—made from purchased materials
Tar paper, roofing: m/pw

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MISCELLANEOUS PRODUCTS OF PETROLEUM AND COAL

2992 Lubricating Oils and Greases

Establishments primarily engaged in blending, compounding, and re-refining lubricating oils and greases from purchased mineral, animal, and vegetable materials. Petroleum refineries engaged in the production of lubricating oils and greases are classified in Industry 2911.

Brake fluid, hydraulic
Cutting oils, blending and compounding
from purchased material
Lubricating greases and oils, not made
in petroleum refineries
Lubricating oils, re-refining

Oils and greases, blending and compounding from purchased materials
Rust arresting compounds, animal and vegetable oil base
Transmission fluid, hydraulic

2999 Products of Petroleum and Coal, Not Elsewhere Classified

Establishments primarily engaged in manufacturing fuel briquettes, boulets, packaged fuel, powdered fuel, and other products of petroleum and coal, not elsewhere classified.

Calced petroleum coke: made from
purchased materials
Coke, petroleum: not produced in pe-
troleum refineries

Fuel briquettes or boulets, made with petroleum binder

MANUFACTURING

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Major Group 30.—RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS*The Major Group as a Whole*

This major group includes establishments manufacturing from natural, synthetic, or reclaimed rubber, gutta percha, balata, or gutta siak, rubber products such as tires, rubber footwear, mechanical rubber goods, heels and soles, flooring, and rubber sundries. This group also includes establishments primarily manufacturing tires, but establishments primarily recapping and retreading automobile tires are classified in Industry 7534. This group also includes establishments engaged in molding primary plastics for the trade, and manufacturing miscellaneous finished plastics products. The manufacture of elastic webbing is classified in Major Group 22; products made of elastic webbing and garments made from rubberized fabrics in Major Group 23; and synthetic rubber in Industry 2822.

Group No. Industry No.

301 TIRES AND INNER TUBES**3011 Tires and Inner Tubes**

Establishments primarily engaged in manufacturing pneumatic casings, inner tubes, and solid and cushion tires for all types of vehicles, airplanes, farm equipment, and children's vehicles; tiring; and camelback, and tire repair and retreading materials. Establishments primarily engaged in retreading tires are classified in Industry 7534.

Camelback for tire retreading
Inner tubes: airplane, automobile, bicycle, motorcycle, and tractor
Pneumatic casings (rubber tires)
Tire sundries and tire repair materials, rubber

Tires, cushion or solid rubber
Tiring, continuous lengths: rubber, with or without metal core

302 RUBBER AND PLASTICS FOOTWEAR**3021 Rubber and Plastics Footwear**

Establishments primarily engaged in manufacturing all rubber and plastics footwear, waterproof fabric upper footwear, and other fabric upper footwear having rubber or plastic soles vulcanized to the uppers. Establishments primarily engaged in manufacturing rubber, composition, and fiber heels, soles, soling strips, and related shoe making and repairing materials are classified in Industry 3069; plastic soles and soling strips in Industry 3079.

Arctics, rubber or rubber soled fabric
Boots, plastics
Boots, rubber or rubber soled fabric
Canvas shoes, rubber soled
Footholds, rubber
Footwear, rubber or rubber soled fabric
Gaiters, rubber or rubber soled fabric
Galoshes, plastics
Galoshes, rubber or rubber soled fabric
Overshoes, plastics

Overshoes, rubber or rubber soled fabric
Pacs: rubber or rubber soled fabric
Sandals, rubber
Shoes, plastics soles molded to fabric uppers
Shoes, rubber or rubber soled fabric uppers
Shower sandals or slippers, rubber

303 RECLAIMED RUBBER**3031 Reclaimed Rubber**

Establishments primarily engaged in reclaiming rubber from scrap rubber tires, tubes, and miscellaneous waste rubber articles by processes which result in devulcanized, depolymerized or regenerated replasticized products containing added ingredients. These products are sold for use as a raw material in the manufacture of rubber goods with or without admixture with crude rubber or synthetic rubber. Establishments primarily engaged in the assembly and wholesale sale of scrap rubber are classified in trade industries.

Reclaimed rubber (reworked by manufacturing processes)

445-987-72-9

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304 RUBBER AND PLASTICS HOSE AND BELTING

3041 Rubber and Plastics Hose and Belting

Establishments primarily engaged in manufacturing rubber and plastics hose and belting, including garden hose. Establishments primarily engaged in manufacturing rubber tubing are classified in Industry 3069; plastic tubing in Industry 3079; and flexible metallic hose in Industry 3599.

Air brake and air line hose, rubber or rubberized fabric
Automobile hose, plastics
Automobile hose, rubber
Belting: conveyor, elevator, transmission, etc.—rubber
Fire hose, rubber
Garden hose, plastics
Garden hose, rubber

Heater hose, plastics
Heater hose, rubber
Hose: cotton fabric, rubber lined
Pneumatic hose: air brake, air line, etc.—rubber or rubberized fabric
Vacuum cleaner hose, plastics
Vacuum cleaner hose, rubber
V-belts, rubber or plastics

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FABRICATED RUBBER PRODUCTS, NOT ELSEWHERE CLASSIFIED

3069 Fabricated Rubber Products, Not Elsewhere Classified

Establishments primarily engaged in manufacturing industrial and mechanical rubber goods, rubberized fabrics and vulcanized rubber clothing, and miscellaneous rubber specialties and sundries. Establishments primarily engaged in rebuilding and retreading tires are classified in Industry 7534; and gaskets and packing in Industry 3293.

Acid bottles, rubber
Air supported rubber structures
Aprons, vulcanized rubber and rubberized fabric: *misc*
Bags, rubber or rubberized fabric
Balloons, advertising and toy: rubber
Balloons, metal foil laminated with rubber
Balls, rubber: except baseballs, basketballs, footballs, golf and tennis
Bath sprays, rubber
Bathing caps and suits, rubber
Battery boxes, jars, and parts: hard rubber
Bibs, vulcanized rubber and rubberized fabric: *misc*
Bottles, rubber
Boxes, hard rubber
Brake lining, rubber
Brushes, rubber
Bulbs for medicine droppers, syringes, atomizers, sprays: rubber
Bushings, rubber
Capes, vulcanized rubber and rubberized fabric: *misc*
Caps, rubber
Castings, rubber
Chlorinated rubbers, natural
Cloaks, vulcanized rubber and rubberized fabric: *misc*
Clothing, vulcanized rubber and rubberized fabric: *misc*
Combs, hard rubber
Culture cups, rubber
Cyclo rubbers, natural
Dress shields, vulcanized rubber and rubberized fabric: *misc*
Druggists' sundries, rubber
Erasers: rubber, or rubber and abrasive combined
Fabrics, rubberized
Finger cots, rubber
Flooring, rubber: tile or sheet
Foam rubber
Fountain syringes, rubber
Friction tape, rubber
Fuel tanks, collapsible: rubberized fabric
Funnels, rubber

Gloves: surgeons', electricians', household, etc.—rubber
Grips and handles, rubber
Grommets, rubber
Gutta percha compounds
Hair curlers, rubber
Hairpins, rubber
Handles, rubber
Hard rubber products
Hard surface floor coverings: rubber
Heels, boot and shoe: rubber, composition, and fiber
Jar rings, rubber
Laboratory sundries: cases, covers, funnels, cups, bottles, etc.—rubber
Latex, foamed
Life jackets: inflatable, rubberized fabric
Life rafts, rubber
Liner strips, rubber
Mallets, rubber
Mats and matting: bath, door, etc.—rubber
Mattress protectors, rubber
Mattresses, pneumatic: fabric coated with rubber
Medical sundries, rubber
Mittens, rubber
Molded rubber products
Mouthpieces for pipes, cigarette holders, etc.—rubber
Nipples, rubber
Orthopedic sundries, molded rubber
Pacifiers, rubber
Pads, kneeling: rubber
Pants, baby: vulcanized rubber and rubberized fabric—*misc*
Pillows, sponge rubber
Pipestems and bits, tobacco: hard rubber
Platens, except printers': solid or covered rubber
Plumbers' rubber goods
Pontoon, rubber
Pump sleeves, rubber
Rods, hard rubber
Rolls, except printers': solid or covered rubber
Rubber bands

MANUFACTURING

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Group Industry
No. No.

396 FABRICATED RUBBER PRODUCTS, NOT ELSEWHERE CLASSIFIED—Continued

3069 Fabricated Rubber Products, Not Elsewhere Classified—Continued

Rubber covered motor mounting rings (rubber bonded)	Teething rings, rubber
Rubber heels, soles, and sooling strips	Thermometer cases, rubber
Rug backing compounds, latex	Thread, rubber: except fabric covered
Separators, battery: rubber	Tile, rubber
Sheeting, rubber or rubberized fabric	Top lift sheets, rubber
Sheets, hard rubber	Top roll covering, for textile mill machinery: rubber
Sleeves, pump: rubber	Toys, rubber
Soles, boot and shoe: rubber, composition, and fiber	Trays, rubber
Soling strips, boot and shoe: rubber, composition, and fiber	Tubing, rubber
Spatulas, rubber	Type, rubber
Sponge rubber and sponge rubber products	Urinals, rubber
Stair treads, rubber	Valves, hard rubber
Stationers' sundries, rubber	Wainscoting, rubber
Stoppers, rubber	Washers, rubber
	Water bottles, rubber
	Weather strip, sponge rubber
	Wet suits, rubber

307 MISCELLANEOUS PLASTICS PRODUCTS

3079 Miscellaneous Plastics Products

Establishments primarily engaged in molding primary plastics for the trade, and fabricating miscellaneous finished plastics products. Establishments primarily engaged in manufacturing fabricated plastics products or plastics film, sheet, rod, nontextile monofilaments and regenerated cellulose products, and vulcanized fiber are classified in this industry, whether from purchased resins or from resins produced in the same plant. Establishments primarily engaged in compounding purchased resins are also classified in this industry. Establishments primarily engaged in manufacturing artificial leather are classified in Industry 2295.

Air mattresses, plastics	Film base, cellulose acetate or nitro-cellulose plastics (nonsensitized)
Aquarium accessories, plastics	Floor and wall covering, unsupported plastics
Awnings, fiber glass and plastics combination	Flower pots, plastics
Bands, cellulose	Foamed pads and packaging, plastics
Bands, viscose	Foams, plastics
Battery cases, plastics or plastics composition	Gloves and mittens: plastics
Bearings, plastics	Gutters, fiberglass
Bifold inserts, plastics	Gutters, plastic: glass fiber reinforced
Blister and bubble formed packaging, plastics	Hardware, plastics
Boats, nonrigid: plastics	Heels, boot and shoe: plastics
Bottles, plastics	Ice chests or coolers, portable: foam plastics
Bowl covers, plastics	Identification cards, plastics
Boxes, plastics	Injection molding of plastics, for the trade
Brush handles, plastics	Insulation and cushioning material, foamed plastics
Buckets, plastics	Kitchenware, plastics
Caps, cellulose	Kits, plastics
Carafes, plastics	Laminated plastics sheets, rods, and tubes
Caseln products, molded for the trade	Laminating of plastics, for the trade
Cases, plastics	Lamp bases, plastics
Casting of plastics, for the trade	Laundry tubs, plastics: glass fiber base
Cellophane	Lenses, plastics: except ophthalmic or optical
Celluloid products, molded for the trade	Life rafts, nonrigid: plastics
Closures, plastics	Molding primary plastics, for the trade
Clothes hangers, plastics	Monofilaments, nontextile
Clothespins, plastics	Netting, plastics
Composition stone, plastics	Novelties, plastics
Containers, plastics: except bags	Packing materials, plastics (sheet, shredded, or rigid foam)
Cups, plastics, including foamed	Palls, plastics
Custom compounding of purchased resins	Panels, building: corrugated and flat—plastics
Dishes, plastics	Photographic film base (nonsensitized)
Doors, folding: plastics or plastics coated fabric—metal frame	Pipe fittings, plastics
Downspouts, plastics	Pipe, plastics
Drums, plastics (containers)	Planters, plastics
Engraving of plastics	
Fiber, vulcanized: sheets, rods, tubes, etc.	

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

307 MISCELLANEOUS PLASTICS PRODUCTS—Continued

3079 Miscellaneous Plastics Products—Continued

Plates, plastics
 Plumbing fixtures and parts, plastics
 Polyethylene film
 Polyvinyl film
 Pontoons, nonrigid: plastics
 Regenerated cellulose, except fiber
 Rods, plastics
 Saucers, plastics
 Septic tanks, plastics
 Sheets, plastics
 Shower stalls, fiberglass and plastics
 Shutters, plastics
 Siding, plastics
 Soles, boot and shoe: plastics
 Soling strips, boot and shoe: plastics
 Sponges, cellulose
 Spouting, fiberglass
 Spouting, plastics: glass fiber reinforced
 Stock shapes, plastics
 Suitcase shells, plastics
 Synthetic food casings (including fibrous, plastics regenerated collagen)

Synthetic resin finished products:
 molded, cast, and laminated
 Tableware, plastics
 Tile, plastics: unsupported
 Tires, plastics
 Tissue dispensers, plastics
 Tool handles, plastics
 Tops, plastics (dispenser, shaker, etc.)
 Trays, plastics
 Tubes, plastics
 Tubing, plastics
 Tubs, plastics
 Tumblers, plastics
 Valves, plastics
 Vials, plastics
 Vulcanized fiber sheets, rods, and tubes
 Warmers, bottle: plastics
 Watering pots, plastics
 Window screening, plastics
 Window sheeting, plastics
 Windshields, plastics
 Work gloves, plastics

MANUFACTURING

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Major Group 31.—LEATHER AND LEATHER PRODUCTS*The Major Group as a Whole*

This major group includes establishments engaged in tanning, currying, and finishing hides and skins, and establishments manufacturing finished leather and artificial leather products and some similar products made of other materials. Leather converters are also included.

Group Industry
No. No.

311 LEATHER TANNING AND FINISHING**3111 Leather Tanning and Finishing**

Establishments primarily engaged in tanning, currying, and finishing hides and skins into leather. This industry also includes leather converters, who buy hides and skins and have them processed into leather on a contract basis by others.

Bag leather
Belting butts, curried or rough
Belting leather
Bookbinders' leather
Bridle leather
Buffings, russet
Case leather
Chamois leather
Collar leather
Coloring of leather
Cutting of leather
Die cutting of leather
Embossing of leather
Fancy leathers
Fishers, leather (flesh side of split leather)
Garment leather
Glove leather
Handbag leather
Harness leather
Japanning of leather
Lace leather
Latigo leather
Leather coloring, cutting, embossing, japanning, and wetting

Leather converters
Leather: tanning, currying, and finishing
Lining leather
Mechanical leather
Parchment leather
Patent leather
Rawhide
Roller leather
Saddlery leather
Shearling (prepared sheepskin)
Skirting leather
Skivers, leather
Sole leather
Specialty leathers
Splits, leather
Strap leather
Sweatband leather
Tannerles, leather
Upholstery leather
Upper leather
Vellum leather
Wetling leather

312 BOOT AND SHOE CUT STOCK AND FINDINGS**3121 Boot and Shoe Cut Stock and Findings**

Establishments primarily engaged in manufacturing leather soles, inner soles, and other boot and shoe cut stock and findings. This industry also includes finished wood heels. Establishments primarily engaged in manufacturing heels, soling strips, and soles made of rubber, composition, plastics, and fiber are classified in Major Group 30.

Boot and shoe cut stock and findings
Bows, shoe
Box toes, leather (shoe cut stock)
Buckles, shoe
Caps, heel and toe: leather or metal
Clasps, shoe
Counters (shoe cut stock)
Cut stock for boots and shoes
Findings, boot and shoe
Heel caps, leather or metal
Heel lifts, leather
Heels, boot and shoe: finished wood or leather
Inner soles, leather
Laces, boot and shoe: leather
Leather wetting
Lifts, heel: leather
Linings, boot and shoe: leather
Ornaments, shoe
Pegs, shoe

Quarters (shoe cut stock)
Rands (shoe cut stock)
Shanks, shoe
Shoe soles: except rubber, composition, plastics, and fiber
Soles, boot and shoe: except rubber, composition, plastics, and fiber
Stays, shoe
Taps, shoe: regardless of material
Tips, shoe: regardless of material
Toe caps, leather or metal
Tongues, boot and shoe: leather
Top lifts, boot and shoe
Trimmings, shoe: leather
Uppers (shoe cut stock)
Vamps, leather
Wetling, leather (cut stock and finding)
Wood heel blocks, for sale as such
Wood heels, finished (shoe findings)

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

314 FOOTWEAR, EXCEPT RUBBER

3142 House Slippers

Establishments primarily engaged in manufacturing house slippers of leather or other materials.

House slippers

Slipper socks, made from purchased socks

3143 Men's Footwear, Except Athletic

Establishments primarily engaged in the production of men's footwear designed primarily for dress, street, and work. Establishments primarily engaged in the production of such protective footwear as rubbers, rubber boots, storm shoes, galoshes, and other footwear with rubber soles vulcanized to the uppers are classified in Industry 3021. Establishments primarily engaged in the production of athletic shoes and youths' and boys' shoes are classified in Industry 3149.

Boots, dress and casual: men's
Casual shoes, men's: except athletic
and rubber footwear
Dress shoes, men's
Footwear, men's: except slippers,
athletic, and vulcanized rubber
footwear

Footwear, men's: leather or vinyl with
molded or vulcanized soles
Orthopedic shoes, men's: except extension
shoes
Shoes, men's: except slippers, athletic,
rubber and extension shoes
Work shoes, men's

3144 Women's Footwear, Except Athletic

Establishments primarily engaged in the production of women's footwear designed primarily for dress, street, and work. Establishments primarily engaged in the production of athletic shoes and misses', children's, infants', and babies' footwear are classified in Industry 3149. Establishments primarily engaged in the production of rubber or plastics footwear are classified in Industry 3021.

Boots, canvas and leather, except athletic: women's
Footwear, women's: except slippers,
athletic, vulcanized rubber footwear
Footwear, women's: leather or vinyl
with molded or vulcanized soles

Orthopedic shoes, women's: except extension
shoes
Shoes, women's: except slippers, athletic,
and rubber footwear

3149 Footwear, Except Rubber, Not Elsewhere Classified

Establishments primarily engaged in the production of shoes, not elsewhere classified, such as misses', youths', boys', children's, infants', and babies' footwear, and athletic footwear. Establishments primarily engaged in the production of rubber or plastics footwear are classified in Industry 3021.

Athletic shoes, except rubber
Ballet slippers
Beach sandals, except rubber
Footwear, children's: except house
slippers and vulcanized rubber footwear
Footwear, children's: leather or vinyl
with molded or vulcanized soles

Moccasins
Orthopedic shoes, children's: except extension
shoes
Sandals, children's: except rubber
Shoe dyeing for the trade
Shoes: novelty, wooden, etc.
Shower sandals, except rubber

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LEATHER GLOVES AND MITTENS

3151 Leather Gloves and Mittens

Establishments primarily engaged in manufacturing dress, semidress, and work gloves exclusively of leather or leather with lining of other material. Establishments primarily engaged in manufacturing sporting and athletic gloves are classified in Industry 3949; and dress, semidress, and work gloves and mittens of cloth or cloth and leather combined in Industry 2381.

Dress and semidress gloves, leather
Lined leather gloves or mittens

Welders' gloves
Work gloves, leather

MANUFACTURING

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Group Industry
No. No.**316 LUGGAGE****3161 Luggage**

Establishments primarily engaged in manufacturing luggage of leather or other materials.

Attaché cases, regardless of materials
Bags (luggage), regardless of material
Boxes, hat: except paper or paper-board
Briefcases, regardless of material
Camera carrying bags, plastic
Cases, leather (luggage)
Cases, musical instrument
Luggage, regardless of material

Musical instrument cases
Sample cases, regardless of material
Satchels, regardless of material
Shoe kits, regardless of material
Suitcases, regardless of material
Traveling bags, regardless of material
Trunks, regardless of material
Valises, regardless of material
Wardrobe bags (luggage)

317 HANDBAGS AND OTHER PERSONAL LEATHER GOODS**3171 Women's Handbags and Purses**

Establishments primarily engaged in manufacturing women's handbags and purses of leather or other materials, except precious metal (Industry 3911).

Handbags, women's: of all materials except precious metal
Pocketbooks, women's: of all materials except precious metal

Purses, women's: of all materials except precious metal

3172 Personal Leather Goods, Except Women's Handbags and Purses

Establishments primarily engaged in manufacturing small articles, such as billfolds, key cases, and coin purses of leather or other materials, except precious metal (Industry 3911).

Billfolds, regardless of material
Card cases, of all materials except precious metal
Cases, glasses: regardless of material
Cases, jewelry: regardless of materials
Checkbook covers, regardless of material
Cigar cases, of all materials except precious metal
Cigarette cases, of all materials except precious metal
Coin purses, regardless of material
Comb cases, of all materials except precious metal
Compacts, solid leather
Cosmetic bags, regardless of material

Key cases, regardless of material
Leather goods, small: personal
Pocketbooks, men's: regardless of material
Pouches, tobacco: regardless of material
Purses, men's: regardless of material
Sewing cases, regardless of material
Straps, watch: leather
Tobacco pouches, regardless of material
Toilet kits and cases, fitted or unfitted: regardless of material
Vanity cases, leather
Wallets, regardless of material
Watch straps, leather

319 LEATHER GOODS, NOT ELSEWHERE CLASSIFIED**3199 Leather Goods, Not Elsewhere Classified**

Establishments primarily engaged in manufacturing leather goods, not elsewhere classified, such as saddlery, harness, and whips, embossed leather goods, leather desk sets, razor strops, and leather belting. Establishments primarily engaged in manufacturing gaskets and packing are classified in Industry 3293.

Aprons: blacksmiths', welders', etc.—leather
Aprons, textile machinery: leather
Bags, feed: for horses
Belt laces, leather
Belts, safety: leather
Boots, horse
Boxes, leather
Burnt leather goods
Collars and collar pads (harness)
Corners, luggage: leather
Crops, riding
Desk sets, leather
Dog furnishings: collars, leashes, harness, muzzles, etc.—leather
Fly nets (harness)
Halters (harness)
Handles, whip and luggage: leather
Harness and harness parts
Helmets, except athletic: leather

Holsters, leather
Jackets, welders': leather
Lashes (whips)
Leather belting for machinery: flat, solid, twisted, and built-up
Leather goods, embossed
Leggings, welders': leather
Mill strapping for textile mills, leather
Novelties, leather
Puttees, canvas and leather
Razor strops
Saddles and parts
Seat belts, leather
Sleeves, welders': leather
Spats
Stirrups, wood and metal
Straps, except watch straps: leather
Whips, horse
Whipstocks

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STANDARD INDUSTRIAL CLASSIFICATION

Major Group 32.—STONE, CLAY, GLASS, AND CONCRETE PRODUCTS*The Major Group as a Whole*

This major group includes establishments engaged in manufacturing flat glass and other glass products, cement, structural clay products, pottery, concrete and gypsum products, cut stone, abrasive and asbestos products, etc., from materials taken principally from the earth in the form of stone, clay, and sand. When separate reports are available for mines and quarries operated by manufacturing establishments classified in this major group, the mining and quarrying activities are classified in Division B. When separate reports are not available, the mining and quarrying activities other than those of Industry 3295 are classified herein with the manufacturing operations.

If separate reports are not available for crushing, grinding, and other preparation activities of Industry 3295, these establishments are classified in Division B.

Group No. Industry No.

321 FLAT GLASS**3211 Flat Glass**

Establishments primarily engaged in manufacturing flat glass. This industry also produces laminated glass, but establishments primarily engaged in manufacturing laminated glass from purchased flat glass are classified in Industry 3231.

Building glass, flat
Cathedral glass
Float glass
Glass, colored: cathedral and antique
Glass, flat
Insulating glass, sealed units: *mitse*
Laminated glass, made from glass produced in the same establishment
Multiple-glazed insulating units, *mitse*
Opalescent flat glass
Ophthalmic glass, flat
Optical glass, flat

Picture glass
Plate glass blanks for optical or ophthalmic uses
Plate glass, polished and rough
Sheet glass
Sheet glass blanks for optical or ophthalmic uses
Skylight glass
Spectacle glass
Structural glass, flat
Tempered glass, *mitse*
Window glass, clear and colored

322 GLASS AND GLASSWARE, PRESSED OR BLOWN

This group includes establishments primarily engaged in manufacturing glass and glassware, pressed, blown, or shaped from glass produced in the same establishment. Establishments primarily engaged in manufacturing glass products from purchased glass are classified in Industry 3231.

3221 Glass Containers

Establishments primarily engaged in manufacturing glass containers for commercial packing and bottling, and for home canning.

Ampoules, glass
Bottles for packing, bottling, and canning: glass
Carboys, glass
Containers for packing, bottling, and canning: glass
Cosmetic jars, glass
Fruit jars, glass

Jars (packers' ware), glass
Jugs (packers' ware), glass
Medicine bottles, glass
Milk bottles, glass
Packers' ware (containers), glass
Vials, glass: made in glass making establishments
Water bottles, glass

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Group Industry
No. No.

323

GLASS AND GLASSWARE, PRESSED OR BLOWN—Continued

3229 Pressed and Blown Glass and Glassware, Not Elsewhere Classified

Establishments primarily engaged in manufacturing glass and glassware, not elsewhere classified, pressed, blown, or shaped from glass produced in the same establishment. Establishments primarily engaged in manufacturing textile glass fibers are also included in this industry, but establishments primarily engaged in manufacturing glass wool insulation products are classified in Industry 3296. Establishments primarily engaged in the production of pressed lenses for vehicular lighting, beacons, and lanterns are also included in this industry, but establishments primarily engaged in the production of optical lenses are classified in Industry 3832. Establishments primarily engaged in manufacturing glass containers are classified in Industry 3221, and complete electric light bulbs in Industry 3641.

Art glassware, made in glassmaking plants
Ash trays, glass
Barware, glass
Battery jars, glass
Blocks, glass
Bowls, glass
Bulbs for electric lights, without filaments or sockets: *m/ps*
Candlesticks, glass
Centerpieces, glass
Chimneys, lamp: glass—pressed or blown
Christmas tree ornaments, from glass: *m/ps*
Clip cups, glass
Cooking utensils, glass and glass ceramic
Drinking straws, glass
Fibers, glass
Flameware, glass and glass ceramic
Frying pans, glass and glass ceramic
Glass blanks for electric light bulbs
Glass brick
Glassware: art, decorative, and novelty
Glassware, except glass containers for packing, bottling, and home canning
Goblets, glass
Illuminating glass: light shades, reflectors, lamp chimneys, and globes
Industrial glassware and glass products, pressed or blown

Ink wells, glass
Insulators, electrical: glass
Lamp parts, glass
Lamp shades, glass
Lantern globes, glass: pressed or blown
Lens blanks, optical and ophthalmic
Lenses, glass: for lanterns, flashlights, headlights, and searchlights
Level vials for instruments, glass
Light shades, glass: pressed or blown
Lighting glassware, pressed or blown
Novelty glassware
Ophthalmic glass, except flat
Optical glass blanks
Reflectors for lighting equipment, glass: pressed or blown
Refrigerator dishes and jars, glass
Scientific glassware, pressed or blown: made in glassmaking plants
Stemware, glass
Tableware, glass and glass ceramic
Teakettles, glass and glass ceramic
Technical glassware and glass products, pressed or blown
Textile glass fibers
Tobacco jars, glass
Trays, glass
Tubing, glass
Tumblers, glass
TV tube blanks, glass
Vases, glass
Yarn, fiberglass: made in glass plants

323

GLASS PRODUCTS, MADE OF PURCHASED GLASS

3231 Glass Products, Made of Purchased Glass

Establishments primarily engaged in manufacturing glass products from purchased glass. Establishments primarily engaged in manufacturing optical lenses and ophthalmic lenses are classified in Major Group 38.

Aquariums and reflectors, made from purchased glass
Art glass, made from purchased glass
Artificial flowers, foliage, fruits and vines: glass—*m/ps*
Christmas tree ornaments, made from purchased glass
Cut and engraved glassware, made from purchased glass
Decorated glassware: chipped, engraved, etched, sandblasted, etc.—*m/ps*
Doors, made from purchased glass
Enameled glass, made from purchased glass
Encrusting gold, silver, or other metals on glass products: *m/ps*
Fruit, made from purchased glass
Furniture tops, glass: cut, beveled, and polished

Glass, scientific apparatus: for drug-gists, hospitals, laboratories—*m/ps*
Glass, sheet: bent—made from purchased glass
Glassware, decorated: chipped, engraved, sandblasted, etc.—*m/ps*
Grasses, artificial: made from purchased glass
Ground glass, made from purchased glass
Industrial glassware, made from purchased glass
Insulating glass, made from purchased glass
Laboratory glassware, made from purchased glass
Laminated glass, made from purchased glass
Leaded glass, made from purchased glass

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

323 GLASS PRODUCTS, MADE OF PURCHASED GLASS—Continued

3231 Glass Products, Made of Purchased Glass—Continued

Medicine droppers, made from purchased glass
Mirrors, framed or unframed: made from purchased glass
Mirrors, truck and automobile: made from purchased glass
Mosaics, glass: made from purchased glass
Multiple-glazed insulating units, made from purchased glass
Novelties, glass: fruit, foliage, flowers, animals, etc.—m/p/m
Ornamented glass, made from purchased glass
Plants and foliage, made from purchased glass
Reflector glass beads, for highway signs and other reflectors: m/p/m

Safety glass, made from purchased glass
Silvered glass, made from purchased glass
Stained glass, made from purchased glass
Table tops, made from purchased glass
Technical glassware, m/p/m
Tempered glass, made from purchased glass
Test tubes, made from purchased glass
Vials, made from purchased glass
Watch crystals, made from purchased glass
Windows, stained glass
Windshields, made from purchased glass

324 CEMENT, HYDRAULIC

3241 Cement, Hydraulic

Establishments primarily engaged in manufacturing hydraulic cement, including portland, natural, masonry, and pozzolan cements.

Cement, hydraulic: portland, natural, masonry, pozzolan

325 STRUCTURAL CLAY PRODUCTS

3251 Brick and Structural Clay Tile

Establishments primarily engaged in manufacturing brick and structural clay tile. Establishments primarily engaged in manufacturing clay firebrick are classified in Industry 3255, nonclay firebrick in Industry 3297, sand lime brick in Industry 3299, and glass brick in Industry 3229.

Book tile, clay
Brick: common face, glazed, vitrified, and hollow—clay
Building tile: clay
Ceramic glazed brick, clay
Chimney blocks, radial: clay
Corncrib tile
Facing tile, clay: glazed and unglazed
Fireproofing tile, clay

Floor arch tile, clay
Flooring brick, clay
Furring tile, clay
Partition tile, clay
Paving brick, clay
Silo tile
Stumped brick
Structural tile, clay

3253 Ceramic Wall and Floor Tile

Establishments primarily engaged in manufacturing ceramic wall and floor tile. Establishments primarily engaged in manufacturing structural clay tile are classified in Industry 3251, and drain tile in Industry 3259.

Ceramic tile, floor and wall: glazed and unglazed
Enamel tile, floor and wall: clay
Falcon tile

Mosaic tile, ceramic: glazed and unglazed
Promenade tile, clay
Quarry tile, clay
Tile, clay floor and wall: enameled

3255 Clay Refractories

Establishments primarily engaged in manufacturing clay firebrick and other heat resisting clay products. Establishments primarily engaged in manufacturing nonclay refractories, as well as all graphite refractories whether of carbon bond or ceramic bond, are classified in Industry 3297.

MANUFACTURING

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Group Industry
No. No.

325 STRUCTURAL CLAY PRODUCTS—Continued**3255 Clay Refractories—Continued**

Brick, clay refractory: fire clay and high alumina
Brick, ladle: clay
Castable refractories, clay
Cement, clay refractory
Crucibles, fire clay
Fire clay blocks, bricks, tile and special shapes
Firebrick, clay
Floaters, glass house: clay
Foundry refractories, clay
Glass house refractories
Heater radiants, clay

Hot top refractories, clay
Insulating firebrick and shapes, clay
Kiln furniture, clay
Ladle brick, clay
Melting pots, glass house: clay
Mortars, clay refractory
Plastic fire clay bricks
Plastic refractories, clay
Rings, glass house: clay
Saggers
Stoppers, glass house: clay
Tank blocks, glass house: clay
Tile, clay refractory

3259 Structural Clay Products, Not Elsewhere Classified

Establishments primarily engaged in manufacturing clay sewer pipe and structural clay products, not elsewhere classified.

Adobe brick
Architectural terra cotta
Blocks, segment: clay
Chimney pipe and tops, clay
Conduit, vitrified clay
Coping, wall: clay
Drain tile, clay

Liner brick and plates, for lining sewers, tanks, etc.: vitrified clay
Lining, stove and flue: clay
Roofing tile, clay
Sewer pipe and fittings, clay
Thimbles, chimney: clay
Tile, sewer: clay

326 POTTERY AND RELATED PRODUCTS**3261 Vitreous China Plumbing Fixtures and China and Earthenware Fittings and Bathroom Accessories**

Establishments primarily engaged in manufacturing china plumbing fixtures and china and earthenware fittings and bathroom accessories.

Bathroom accessories, vitreous china and earthenware
Bidets, vitreous china
Bolt caps, vitreous china and earthenware
Closet bowls, vitreous china
Drinking fountains, vitreous china
Faucet handles, vitreous china and earthenware
Flush tanks, vitreous china

Laundry trays, vitreous china
Lavatories, vitreous china
Plumbing fixtures, vitreous china
Sinks, vitreous china
Soap dishes, vitreous china and earthenware
Toilet fixtures, vitreous china
Towel bar holders, vitreous china and earthenware
Urinals, vitreous china

3262 Vitreous China Table and Kitchen Articles

Establishments primarily engaged in manufacturing vitreous china table and kitchen articles for use in households and in hotels, restaurants, and other commercial institutions for preparing, serving, or storing food or drink. Establishments primarily engaged in manufacturing fine (semivitreous) types of earthenware (whiteware) table and kitchen articles are classified in Industry 3263.

Bone china
Commercial tableware and kitchen articles, vitreous china
Cooking ware, china
Dishes, commercial and household: vitreous china

Kitchen articles, commercial and household: vitreous china
Table articles, vitreous china

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

326

POTTERY AND RELATED PRODUCTS—Continued

3263 Fine Earthenware (Whiteware) Table and Kitchen Articles

Establishments primarily engaged in manufacturing fine (semivitreous) types of earthenware table and kitchen articles for preparing, serving, or storing food or drink. Establishments primarily engaged in manufacturing vitreous china table and kitchen articles are classified in Industry 3262.

Cooking ware, fine earthenware
Earthenware, household and commercial: semivitreous
Kitchen articles, semivitreous earthenware

Tableware, household and commercial: semivitreous
Whiteware, fine type semivitreous table and kitchen articles

3264 Porcelain Electrical Supplies

Establishments primarily engaged in manufacturing porcelain electrical insulators: molded porcelain parts for electrical devices, spark plug and steatitic porcelain, and other electrical supplies from clay and other ceramic materials.

Alumina porcelain insulators
Beryllia porcelain insulators
Cleats, porcelain
Ferrite, except for electronic application
Insulators, electrical: porcelain
Knobs, porcelain

Magnets, permanent, ceramic or ferrite, except for electronic applications
Porcelain parts, molded: for electrical devices
Spark plug porcelain
Titania porcelain insulators
Tubes, porcelain

3269 Pottery Products, Not Elsewhere Classified

Establishments primarily engaged in firing and decorating white china and earthenware for the trade and manufacturing art and ornamental pottery, industrial and laboratory pottery, stoneware and coarse earthenware table and kitchen articles, unglazed red earthenware florists' articles, and other pottery products, not elsewhere classified.

Art and ornamental ware, pottery
Ash trays, pottery
Chemical porcelain
Chemical stoneware (pottery products)
China firing and decorating, for the trade
Cones, pyrometric: earthenware
Cooking ware: stoneware, coarse earthenware, and pottery
Crockery
Decalcomania work on china and glass, for the trade
Earthenware table and kitchen articles, coarse
Encrusting gold, silver, or other metal on china, for the trade
Figures, pottery: china, earthenware, and stoneware

Filtering media, pottery
Florists' articles, red earthenware
Flower pots, red earthenware
Forms for dipped rubber products, pottery
Grinding media, pottery
Heater parts, pottery
Kitchen articles, coarse earthenware
Lamp bases, pottery
Pottery: art, garden, decorative, industrial, and laboratory
Pyrometer tubes
Rockingham earthenware
Smokers' articles, pottery
Stationery articles, pottery
Textile guides, porcelain
Vases, pottery (china, earthenware, and stoneware)

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CONCRETE, GYPSUM, AND PLASTER PRODUCTS

3271 Concrete Block and Brick

Establishments primarily engaged in manufacturing concrete building block and brick from a combination of cement and aggregate. Contractors engaged in concrete construction work are classified in the construction industries, and establishments primarily engaged in mixing and delivering ready-mixed concrete in Industry 3273.

Blocks, concrete and cinder
Brick, concrete

Decorative block, concrete: split, slump, shadowal
Plinth blocks, precast terrazzo

MANUFACTURING

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Group Industry
No. No.

327 CONCRETE, GYPSUM, AND PLASTER PRODUCTS—Continued

3272 Concrete Products, Except Block and Brick

Establishments primarily engaged in manufacturing concrete products, except block and brick, from a combination of cement and aggregate. Contractors engaged in concrete construction work are classified in the construction industries, and establishments primarily engaged in mixing and delivering ready-mixed concrete in Industry 3273.

Areaways, basement window: concrete	Lintels, concrete
Art marble, concrete	Manhole covers and frames, concrete
Ashlar, cast stone	Mantels, concrete
Bathtubs, concrete	Mattresses for river revetment, concrete articulated
Battery wells and boxes, concrete	Meter boxes, concrete
Building materials, concrete: except block and brick	Monuments, concrete
Building stone, artificial: concrete	Panels and sections, prefabricated: concrete
Burial vaults, concrete and precast terrazzo	Paving materials, prefabricated concrete, except blocks
Cast stone, concrete	Pier footings, prefabricated concrete
Catch basin covers, concrete	Piling, prefabricated concrete
Ceiling squares, concrete	Pipe, concrete
Chimney caps, concrete	Pipe, lined with concrete
Church furniture, concrete	Poles, concrete
Columns, concrete	Posts, concrete
Concrete, dry mixture	Pressure pipe, reinforced concrete
Concrete products, precast: except block and brick	Prestressed concrete products
Conduits, concrete	Roofing tile and slabs, concrete
Copings, concrete	Septic tanks, concrete
Covers, catch basin: concrete	Sewer pipe, concrete
Cribbing, concrete	Shower receptors, concrete
Crossing slabs, concrete	Siding, precast stone
Culvert pipe, concrete	Sills, concrete
Cylinder pipe, prestressed concrete	Silo staves, cast stone
Cylinder pipe, pretensioned concrete	Silos, prefabricated concrete
Door frames, concrete	Slabs, crossing: concrete
Drain tile, concrete	Spanish floor tile, concrete
Fireplaces, concrete	Squares for walls and ceilings, concrete
Floor filler tiles, concrete	Steps, prefabricated concrete
Floor slabs, precast concrete	Stone, cast concrete
Floor tile, precast terrazzo	Stools, precast terrazzo
Fountains, concrete	Storage tanks, concrete
Fountains, wash: precast terrazzo	Tanks, concrete
Garbage boxes, concrete	Thresholds, precast terrazzo
Grave markers, concrete	Tile, precast terrazzo or concrete
Grave vaults, concrete	Tombstones, precast terrazzo or concrete
Grease traps, concrete	Wall base, precast terrazzo
Housing components, prefabricated: concrete	Wall squares, concrete
Inclinerators, concrete	Wash foundations, precast terrazzo
Irrigation pipe, concrete	Well curbing, concrete
Joists, concrete	Window sills, cast stone
Laundry trays, concrete	

3273 Ready-Mixed Concrete

Establishments primarily engaged in manufacturing portland cement concrete manufactured and delivered to a purchaser in a plastic and unhardened state. This industry includes production and sale of central-mixed concrete, shrink-mixed concrete, and transit-mixed concrete.

Central-mixed concrete	Shrink-mixed concrete
Ready-mixed concrete, production and distribution	Transit-mixed concrete

3274 Lime

Establishments primarily engaged in manufacturing quicklime, hydrated lime, and "dead-burned" dolomite from limestone, dolomite shells, or other substances.

Agricultural lime	Hydrated lime
Building lime	Lime plaster
Dolomite, dead-burned	Masons' lime
Dolomitic lime	Quicklime

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

327 CONCRETE, GYPSUM, AND PLASTER PRODUCTS—Continued

3273 Gypsum Products

Establishments primarily engaged in manufacturing plaster, plasterboard, and other products composed wholly or chiefly of gypsum.

Acoustical plaster, gypsum
Cement, Keene's
Building board, gypsum
Gypsum products: block, board, plaster, rock, tile, etc.
Insulating plaster, gypsum

Orthopedic plaster, gypsum
Panels, plaster: gypsum
Plaster and plasterboard, gypsum
Plaster of paris
Wallboard, gypsum

328 CUT STONE AND STONE PRODUCTS

3281 Cut Stone and Stone Products

Establishments primarily engaged in cutting, shaping, and finishing marble, granite, slate, and other stone for building and miscellaneous uses. Establishments primarily engaged in buying or selling partly finished monuments and tombstones, but performing no work on the stones other than lettering, finishing, or shaping to custom order, are classified in trade industries. The cutting of grindstones, pulpstones, and whetstones at the quarry is classified in Division B.

Altars, cut stone
Baptismal fonts, cut stone
Benches, cut stone
Blackboards, slate
Burial vaults, stone
Church furniture: altars, fonts, communion tables, pulpits, etc.—cut stone
Curbing, granite and stone
Cut stone products for building, ornamental, paving, and other uses
Desk set bases, onyx
Dimension stone for buildings
Flagstones
Furniture, cut stone
Granite: for building, ornamental, paving, and other uses—cut and shaped
Lamp bases, onyx
Limestone, cut and shaped

Marble, building: cut and shaped
Monuments, cut stone: not including only finishing or lettering to order
Paving blocks, cut stone
Pedestals, marble
Pulpits, cut stone
Roofing, slate
Slate and slate products
Statuary, marble
Stone, cut and shaped
Stone, quarrying and processing of own stone products
Switchboard panels, slate
Table tops, marble
Tombstones, cut stone: not including only finishing or lettering to order
Urns, cut stone
Vases, cut stone

329 ABRASIVE, ASBESTOS, AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS

3291 Abrasive Products

Establishments primarily engaged in manufacturing abrasive grinding wheels of natural or synthetic materials, and other abrasive products. The cutting of grindstones, pulpstones, and whetstones at the quarry is classified in mining industries.

Abrasive buffs, bricks, cloth, paper, sticks, stones, wheels, etc.
Abrasive grains, natural and artificial
Abrasives, aluminous
Aluminum oxide (fused) abrasives
Boron carbide abrasives
Bort, crushing
Buffing and polishing wheels, abrasive and nonabrasive
Corundum abrasives
Diamond dressing wheels
Diamond powder
Emery abrasives
Garnet abrasives
Grinding balls, ceramic
Grindstones, artificial
Grit, steel
Hones
Metallic abrasives
Oilstones, artificial

Pads, scouring: soap impregnated
Paper: garnet, emery, aluminum oxide, and mint
Polishing rouge (abrasive)
Polishing wheels
Pumice and pumicite abrasives
Rouge, polishing
Rubbing stones, artificial
Sandpaper
Scythestones, artificial
Silicon carbide abrasives
Sponges, scouring: metallic
Steel shot abrasives
Steel wool
Tripoli
Tungsten carbide abrasives
Wheels, abrasive: except dental
Wheels, diamond abrasive
Wheels, grinding: artificial
Whetstones, artificial

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Group Industry
No. No.**329 ABRASIVE, ASBESTOS, AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS—Continued****3293 Asbestos Products**

Establishments primarily engaged in manufacturing asbestos textiles, asbestos building materials, except asbestos paper (Industry 2861), insulating materials for covering boilers and pipes, and other commodities composed wholly or chiefly of asbestos. Establishments primarily engaged in manufacturing gaskets and steam and other packing are classified in Industry 3293.

Asbestos cement products: siding, pressure pipe, conduits, ducts, etc.
Asbestos products: except steam and other packing and gaskets
Blankets, insulating for aircraft: asbestos
Boiler covering (heat insulating material), except felt
Brake lining, asbestos
Brake lining, sintered metal and ceramic materials
Building materials, asbestos: except asbestos paper
Carded fiber, asbestos
Cloth, asbestos
Clutch facings, asbestos
Cord, asbestos
Felt, woven amosite: asbestos
Floor tile, asphalt
Friction materials, asbestos: woven
Insulation, molded asbestos

Mattresses, asbestos
Millboard, asbestos
Pipe and boiler covering, except felt
Pipe covering (insulation), laminated asbestos paper
Pipe, pressure: asbestos cement
Roofing, asbestos felt roll
Rope, asbestos
Sheet, asbestos cement: flat or corrugated
Shingles, asbestos cement
Siding, asbestos cement
Table pads and padding, asbestos
Tape, asbestos
Textiles, asbestos: except packing
Thread, asbestos
Tile, vinyl asbestos
Tubing, asbestos
Wick, asbestos
Yarn, asbestos

3298 Gaskets, Packing, and Sealing Devices

Establishments primarily engaged in manufacturing gaskets, gasketing materials, compression packings, molded packings, oil seals, and mechanical seals. Included are gaskets, packing, and sealing devices made of leather, rubber, metal, asbestos, and plastics.

Gaskets, regardless of material
Grease retainers, leather
Grease seals, asbestos
Oil seals, asbestos
Oil seals, leather
Oil seals, rubber
Packing: cup, U-valve, etc.—leather

Packing for steam engines, pipe joints, air compressors, etc.
Packing, metallic
Packing, rubber
Steam and other packing
Washers, leather

3295 Minerals and Earths, Ground or Otherwise Treated

Establishments operating without a mine or quarry and primarily engaged in the crushing, grinding, pulverizing, or otherwise preparing clay, ceramic, and refractory minerals; barite; and miscellaneous nonmetallic minerals, except fuels. These minerals are the crude products mined by establishments of Industry Groups 145 and 149 and Industry 1472. Also included are establishments primarily crushing slag and preparing roofing granules. The beneficiation or preparation of other minerals and metallic ores, and the cleaning and grading of coal, are classified in the mining industries, whether or not the operation is associated with a mine.

Barium, ground or otherwise treated
Barytes (barite), ground or otherwise treated
Blast furnace slag
Clay for petroleum refining chemically processed
Clay, ground or otherwise treated
Desiccants, activated: clay
Diatomaceous earth, ground or otherwise treated
Feldspar, ground or otherwise treated
Filtering clays, treated purchased materials
Flint, ground or otherwise treated

Foundry facings, ground or otherwise treated
Fuller's earth, ground or otherwise treated
Graphite, natural: ground, pulverized, refined, or blended
Kaolin, ground or otherwise treated
Lead, black (natural graphite): ground, refined, or blended
Magnesite, crude: ground, calcined, or dead-burned
Mica, ground or otherwise treated
Perlite aggregate
Perlite, expanded

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**329 ABRASIVE, ASBESTOS, AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS—Continued****3295 Minerals and Earths, Ground or Otherwise Treated—Continued**

Plumbago: ground, refined, or blended
Pulverized earth
Pumice, ground or otherwise treated
Pyrophyllite, ground or otherwise treated
Roofing granules
Shale, expanded

Silicon, ultra high purity: treated
purchased materials
Slag, crushed or ground
Solite, ground or otherwise treated
Spar, ground or otherwise treated
Steatite, ground or otherwise treated
Talc, ground or otherwise treated
Vermiculite, exfoliated

3296 Mineral Wool

Establishments primarily engaged in manufacturing mineral wool and mineral wool insulation products made of such siliceous materials as rock, slag, and glass, or combinations thereof. Establishments primarily engaged in manufacturing asbestos insulation products are classified in Industry 3292, and textile glass fibers in Industry 3229.

Acoustical board and tile, mineral wool
Fiberglass insulation
Glass wool

Insulation, mineral wool: made of rock, slag, and silica minerals

3297 Nonclay Refractories

Establishments primarily engaged in manufacturing refractories and crucibles made of materials other than clay. This industry also includes establishments primarily engaged in manufacturing all graphite refractories, whether of carbon bond or ceramic bond. Establishments primarily engaged in manufacturing clay refractories are classified in Industry 3255.

Alumina fused refractories
Brick, bauxite
Brick, carbon
Brick, refractory: chroma, magnesite, silica, and other nonclays
Brick, silicon carbide
Castable refractories, nonclay
Cement: high temperature, refractory (nonclay)
Cement, magnesite
Crucibles: graphite, magnesite, chrome, silica, or other nonclay materials
Dolomite and dolomite-magnesite brick and shapes

Gunning mixes, nonclay
High temperature mortar, nonclay
Hot top—nonclay refractory
Nonclay refractories
Plastic refractories, nonclay
Pyrolytic graphite
Ramming mixes, nonclay
Refractories, castable: nonclay
Refractories, graphite: carbon bond or ceramic bond
Refractory cement, nonclay
Retorts, graphite

3299 Nonmetallic Mineral Products, Not Elsewhere Classified

Establishments primarily engaged in the factory production of statuary and art goods made of plaster of paris and papier mache, and in manufacturing sand lime products and other nonmetallic mineral products, not elsewhere classified.

Architectural sculptures, plaster of paris: factory production only
Art goods: plaster of paris, papier mache, and scagliola
Blocks, sand lime
Brackets, architectural: plaster—factory production only
Built-up mica
Ceramic fiber
Columns, papier mache or plaster of paris
Ecclesiastical statuary: gypsum, clay, or papier mache—factory production
Floor composition, magnesite
Flower boxes, plaster of paris: factory production only
Fountains, plaster of paris: factory production only
Gravel painting
Images, small: gypsum, clay, or papier mache—factory production only
Insulite (foundry materials)
Mica, laminated
Mica products, built-up and sheet, except radio parts

Mica splitting
Moldings, architectural: plaster of paris—factory production only
Ornamental and architectural plaster work: mantels, columns, etc.
Panels, papier mache or plaster of paris
Pedestals, statuary: plaster of paris or papier mache—factory only
Plaques: clay, plaster, or papier mache—factory production only
Sculptures, architectural: gypsum, clay, or papier mache—factory only
Statuary: gypsum, clay, papier mache, scagliola, and metal—factory only
Stucco
Synthetic stones, for gem stones and industrial use
Tile, sand lime
Tubing for electrical purposes, quartz
Urns, gypsum or papier mache: factory production only
Vases, gypsum or papier mache: factory production only

MANUFACTURING

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Major Group 33.—PRIMARY METAL INDUSTRIES*The Major Group as a Whole*

This major group includes establishments engaged in the smelting and refining of ferrous and nonferrous metals from ore, pig, or scrap; in the rolling, drawing, and alloying of ferrous and nonferrous metals; in the manufacture of castings and other basic products of ferrous and nonferrous metals; and in the manufacture of nails, spikes, and insulated wire and cable. This major group also includes the production of coke. Establishments primarily engaged in manufacturing metal forgings or stampings are classified in Group 346.

Group Industry
No. No.

331 BLAST FURNACES, STEEL WORKS, AND ROLLING AND FINISHING MILLS**3312 Blast Furnaces (Including Coke Ovens), Steel Works, and Rolling Mills**

Establishments primarily engaged in manufacturing hot metal, pig iron, silvery pig iron, and ferroalloys from iron ore and iron and steel scrap; converting pig iron, scrap iron and scrap steel into steel; and in hot rolling iron and steel into basic shapes such as plates, sheets, strips, rods, bars, and tubing. Merchant blast furnaces and byproduct or beehive coke ovens are also included in this industry. Establishments primarily engaged in manufacturing ferro and nonferrous additive alloys by electrometallurgical processes are classified in Industry 3313.

Armor plate, made in steel works or rolling mills
Axles, rolled or forged: made in steel works or rolling mills
Bars, iron: made in steel works or rolling mills
Bars, steel: made in steel works or hot rolling mills
Beehive coke oven products
Billets, steel
Blackplate
Blast furnace products
Blooms
Car wheels, rolled
Chemical recovery coke oven products
Coal gas, derived from chemical recovery coke ovens
Coal tar crudes, derived from chemical recovery coke ovens
Coke, produced in beehive ovens
Coke, produced in chemical recovery coke ovens
Cold rolled strip steel, flat bright: made in hot rolling mills
Distillates, derived from chemical recovery coke ovens
Fence posts, iron and steel: made in steel works or rolling mills
Ferroalloys, produced in blast furnaces
Flats, iron and steel: made in steel works and hot rolling mills
Forgings, iron and steel: made in steel works or rolling mills
Frogs, iron and steel: made in steel works or rolling mills
Galvanized hoops, pipes, plates, sheets, and strips: iron and steel
Gun forgings, iron and steel: made in steel works or rolling mills
Hoops, galvanized iron and steel: made in steel works or rolling mills
Hoops, iron and steel: made in steel works or hot rolling mills
Hot rolled iron and steel products
Ingots, steel
Iron, pig
Iron sinter, made in steel mills
Nut rods, iron and steel: made in steel works or rolling mills
Pipe, iron and steel: made in steel works or rolling mills

Plates, made in steel works or rolling mills
Rail joints and fastenings, made in steel works or rolling mills
Railroad crossings, iron and steel: made in steel works or rolling mills
Rails, iron and steel
Rails, rerolled or renewed
Rods, iron and steel: made in steel works or rolling mills
Rounds, tube
Sheet piling, plain: iron and steel—made in steel works or rolling mills
Sheets, iron and steel: made in steel works or rolling mills
Shell slugs, steel: made in steel works or rolling mills
Skelp, iron and steel
Slabs, steel
Spiegeleisen, made in blast furnaces
Spikes and spike rods, made in steel works or rolling mills
Sponge iron
Stainless steel
Steel works producing bars, rods, plates, sheets, structural shapes, etc.
Strips, galvanized iron and steel: made in steel works or rolling mills
Strips, iron and steel: made in steel works or hot rolling mills
Structural shapes, iron and steel
Tar, derived from chemical recovery coke ovens
Terneplate
Terns, iron and steel: long or short
Tie plates, iron and steel
Tin free steel
Tin plate
Tool steel
Tube rounds
Tubes, iron and steel: made in steel works or rolling mills
Tubing, seamless: steel
Well casings, iron and steel: made in steel works or rolling mills
Wheels, car and locomotive: iron and steel—*mitze*
Wire products, iron and steel: made in steel works or rolling mills
Wrought pipe and tubing, made in steel works or rolling mills

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**331 BLAST FURNACES, STEEL WORKS, AND ROLLING AND FINISHING MILLS—
Continued****3313 Electrometallurgical Products**

Establishments primarily engaged in manufacturing ferro and nonferrous additive alloys by electrometallurgical or metallothermic processes, including high percentage ferroalloys and high percentage nonferrous additive alloys.

Additive alloys, except copper: not produced in blast furnaces
Electrometallurgical products, except aluminum, magnesium, and copper
Ferroalloys, not made in blast furnaces
Ferrochromium
Ferromanganese, not produced in blast furnaces
Ferromolybdenum
Ferrophosphorus
Ferrosilicon, not produced in blast furnaces

Ferrotitanium
Ferrotungsten
Ferrovanadium
High percentage ferroalloys, not produced in blast furnaces
Manganese metal, not produced in blast furnaces
Molybdenum silicon, not produced in blast furnaces
Nonferrous additive alloys, high percentage: except copper
Steel, electrometallurgical

3315 Steel Wire Drawing and Steel Nails and Spikes

Establishments primarily engaged in drawing wire from purchased iron or steel rods, bars, or wire and which may be engaged in the further manufacture of products made from wire; establishments primarily engaged in manufacturing steel nails and spikes from purchased materials are also included in this industry. Rolling mills engaged in the production of ferrous wire from wire rods or hot rolled bars produced in the same establishment are classified in Industry 3312. Establishments primarily engaged in drawing nonferrous wire are classified in Group 335.

Brads, steel: wire or cut
Cable, steel: insulated or armored
Horseshoe nails
Nails, steel: wire or cut
Spikes, steel: wire or cut
Staples, steel: wire or cut

Tacks, steel: wire or cut
Wire, ferrous
Wire products, ferrous: made in wire drawing plants
Wire, steel: insulated or armored

3316 Cold Rolled Steel Sheet, Strip, and Bars

Establishments primarily engaged in (1) cold rolling steel sheets and strip from purchased hot rolled sheets; (2) cold drawing steel bars and steel shapes from purchased hot rolled steel bars; and (3) producing other cold finished steel. Establishments primarily engaged in the production of steel, including hot rolled steel sheets, and further cold rolling such sheets are classified in Industry 3312.

Cold finished steel bars: not made in hot rolling mills
Cold rolled steel strip, sheet, and bars: not made in hot rolling mills
Corrugating iron and steel, cold rolled: not made in hot rolling mills
Flat bright steel strip, cold rolled: not made in hot rolling mills

Razor blade strip steel, cold rolled: not made in hot rolling mills
Sheet steel, cold rolled: not made in hot rolling mills
Wire, flat: cold rolled strip: not made in hot rolling mills

3317 Steel Pipe and Tubes

Establishments primarily engaged in the production of welded or seamless steel pipe and tubes and heavy riveted steel pipe from purchased materials. Establishments primarily engaged in the production of steel, including steel skelp or steel blanks, tube rounds, or pierced billets, are classified in Industry 3312.

Boiler tubes, wrought: *m/psm*
Conduit: welded, lock joint, and heavy riveted—*m/psm*
Pipe, seamless steel: *m/psm*
Pipe, wrought: welded, lock joint, and heavy riveted—*m/psm*
Tubes, seamless steel: *m/psm*

Tubing, mechanical and hypodermic sizes: cold drawn stainless steel—*m/psm*
Well casing, wrought: welded, lock joint, and heavy riveted—*m/psm*
Wrought pipe and tubes: welded, lock joint, and heavy riveted—*m/psm*

MANUFACTURING

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Group Industry
No. No.

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IRON AND STEEL FOUNDRIES

This group includes establishments primarily engaged in manufacturing iron and steel castings. These establishments generally operate on a job or order basis, manufacturing castings for sale to others or for interplant transfer. Establishments which produce iron and steel castings and which are also engaged in fabricating operations, such as machining, assembling, etc., in manufacturing a specified product are classified in the industry of the specified product. Iron and steel castings are made to a considerable extent by establishments classified in other industries, that operate foundry departments for the production of castings for incorporation, in the same establishment, into such products as stoves, furnaces, plumbing fixtures, motor vehicles, etc. Establishments primarily engaged in the manufacture and rolling of steel and also making steel castings are classified in Industry 3312. Establishments primarily engaged in manufacturing nonferrous castings are classified in Group 336.

3321 Gray Iron Foundries

Establishments primarily engaged in manufacturing gray iron castings, including cast iron pressure and soil pipes and fittings.

Brake shoes, railroad: cast iron
Car wheels, railroad: chilled cast iron
Castings, gray iron and semisteel
Cooking utensils, cast iron
Couplings, pipe: pressure and soil
pipe—cast iron
Ductile iron castings
Elbows, pipe: pressure and soil pipe,
cast iron
Foundries, gray iron and semisteel
Gas pipe, cast iron
Gray iron foundries

Hydrants, water: cast iron
Ingot molds and stools
Manhole covers, metal
Nipples, pipe: pressure and soil pipe—
cast iron
Nodular iron castings
Pipe and fittings, soil and pressure:
cast iron
Railroad car wheels, chilled cast iron
Rolling mill rolls, iron: not machined
Sash balances, cast iron
Sewer pipe, cast iron
Water pipe, cast iron

3322 Malleable Iron Foundries

Establishments primarily engaged in manufacturing malleable iron castings.

Castings, malleable iron
Foundries, malleable iron

Pearlitic castings, malleable iron

3324 Steel Investment Foundries

Establishments primarily engaged in manufacturing steel investment castings.
Investment castings, steel

3325 Steel Foundries, Not Elsewhere Classified

Establishments primarily engaged in manufacturing steel castings, not elsewhere classified.

Alloy steel castings: except investment
Bushings, cast steel: except investment
Cast steel railroad car wheels
Castings, steel: except investment

Foundries, steel: except investment
Rolling mill rolls, steel: not machined
Steel foundries, except investment

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PRIMARY SMELTING AND REFINING OF NONFERROUS METALS**3331 Primary Smelting and Refining of Copper**

Establishments primarily engaged in smelting copper from the ore, and in refining copper by electrolytic or other processes. Establishments primarily engaged in rolling, drawing, or extruding copper are classified in Industry 3351.

Bars, refinery: primary copper
Blister copper
Blocks, copper
Copper ingots and refinery bars,
primary

Copper smelting and refining, primary
Pigs, copper
Primary smelting and refining of
copper
Slabs, copper: primary

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**333 PRIMARY SMELTING AND REFINING OF NONFERROUS METALS—Continued****3333 Primary Smelting and Refining of Lead**

Establishments primarily engaged in smelting lead from the ore, and in refining lead by any process. Establishments primarily engaged in rolling, drawing, or extruding lead are classified in Industry 3356.

Antifriction bearing metals, lead-base :
primary
Babbitt metal, primary
Lead pigs, blocks, ingots, and refinery
shapes : primary

Lead smelting and refining, primary
Primary smelting and refining of lead
Slabs, lead : primary

3333 Primary Smelting and Refining of Zinc

Establishments primarily engaged in smelting zinc from the ore, and in refining zinc by any process. Establishments primarily engaged in rolling, drawing, or extruding zinc are classified in Industry 3356.

Blocks, zinc
Ingots, zinc
Pigs, zinc
Primary smelting and refining of zinc

Slabs, zinc : primary
Spelter (zinc), primary
Zinc dust, primary

3334 Primary Production of Aluminum

Establishments primarily engaged in producing aluminum from alumina, and in refining aluminum by any process. Establishments primarily engaged in rolling, drawing, or extruding aluminum are classified in Industries 3353, 3354, and 3355.

Aluminum ingots and primary production shapes, from bauxite or alumina
Extrusion ingot, aluminum : primary

Pigs, aluminum
Slabs, aluminum : primary

3339 Primary Smelting and Refining of Nonferrous Metals, Not Elsewhere Classified

Establishments primarily engaged in smelting and refining nonferrous metals, not elsewhere classified. Establishments primarily engaged in rolling, drawing, and extruding these nonferrous primary metals are classified in Industry 3356, and the production of bullion at the site of the mine is classified in the mining industries.

Antimony refining, primary
Beryllium metal
Bismuth refining, primary
Cadmium refining, primary
Chromium refining, primary
Cobalt refining, primary
Columbium refining, primary
Germanium refining, primary
Gold refining, primary
Ingots, magnesium
Iridium refining, primary
Magnesium refining, primary
Nickel refining, primary
Nonferrous refining, primary : except copper, lead, zinc, and aluminum
Nonferrous smelting, primary : except copper, lead, zinc, and aluminum
Pigs, magnesium
Platinum-group metals refining, primary
Precious metal refining, primary
Primary refining of nonferrous metal : except copper, lead, zinc, aluminum

Primary smelting of nonferrous metal : except copper, lead, zinc, aluminum
Refining of nonferrous metal, primary : except copper, lead, zinc, aluminum
Rhenium refining, primary
Selenium refining, primary
Silicon, epitaxial (silicon alloy)
Silicon, pure
Silicon refining, primary (over 99% pure)
Silver refining, primary
Slabs, magnesium : primary
Smelting of nonferrous metal, primary : except copper, lead, zinc, aluminum
Tantalum refining
Tellurium refining, primary
Tin base alloys, primary
Tin refining, primary
Titanium metal sponge and granules
Zirconium metal, sponge and granules

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SECONDARY SMELTING AND REFINING OF NONFERROUS METALS**3341 Secondary Smelting and Refining of Nonferrous Metals**

Establishments primarily engaged in recovering nonferrous metals and alloys from new and used scrap and dross. This industry includes establishments engaged in both the recovery and alloying of precious metals. Plants engaged in the recovery of tin through secondary smelting and refining, as well as by chemical processes, are included in this industry. Establishments primarily engaged in assembling, sorting, and breaking up scrap metal, without smelting and refining, are classified in trade industries.

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Group Industry
No. No.**334 SECONDARY SMELTING AND REFINING OF NONFERROUS METALS—Con.****3341 Secondary Smelting and Refining of Nonferrous Metals—Continued**

Aluminum extrusion ingot, secondary
Aluminum smelting and refining, secondary
Antimonial lead refining, secondary
Babbitt metal, secondary smelting and refining
Brass smelting and refining, secondary
Bronze smelting and refining, secondary
Copper smelting and refining, secondary
Detinning of cans
Detinning of scrap
Germanium refining, secondary
Gold smelting and refining, secondary
Ingots, nonferrous: smelting and refining—secondary
Iridium smelting and refining, secondary
Lead smelting and refining, secondary
Magnesium smelting and refining, secondary

Nickel smelting and refining, secondary
Nonferrous metal smelting and refining, secondary
Platinum-group metals smelting and refining, secondary
Precious metal smelting and refining, secondary
Recovering and refining of nonferrous metals
Recovery of silver from used photographic film
Secondary refining and smelting of nonferrous metals
Selenium refining, secondary
Silver smelting and refining, secondary
Soldier (base metal), pig and ingot: secondary
Tin smelting and refining, secondary
Zinc dust, reclaimed
Zinc smelting and refining, secondary

335 ROLLING, DRAWING, AND EXTRUDING OF NONFERROUS METALS**3351 Rolling, Drawing, and Extruding of Copper**

Establishments primarily engaged in rolling, drawing, and extruding copper, brass, bronze, and other copper base alloy basic shapes, such as plate, sheet, strip, bar, and tubing. Establishments primarily engaged in recovering copper and its alloys from scrap or dross are classified in Industry 3341.

Bands, shell: copper and copper alloy—made in copper rolling mills
Bars, copper and copper alloy
Brass rolling and drawing
Bronze rolling and drawing
Cartridge cups, discs, and sheets: copper and copper alloy
Cups, primer and cartridge: copper and copper alloy
Extruded shapes, copper and copper alloy
Pipe, extruded and drawn: brass, bronze, and copper
Plates, copper and copper alloy
Primer cups, copper and copper alloy

Balls, rolled and drawn: brass, bronze, and copper
Rods, copper and copper alloy
Rolling, drawing, and extruding of copper and copper alloys
Rotating bands, copper and copper alloy
Sheets, copper and copper alloy
Shell discs, copper and copper alloy
Slugs, copper and copper alloy
Strip, copper and copper alloy
Tubing, copper and copper alloy
Wire, copper and copper alloy: made in brass mills

3353 Aluminum Sheet, Plate, and Foil

Establishments primarily engaged in flat rolling aluminum and aluminum base alloy basic shapes such as sheet, plate, and foil, including establishments producing welded tube. Also included are establishments primarily producing similar products by continuous casting.

Coils, sheet: aluminum
Foil, plain aluminum
Plates, aluminum

Sheets, aluminum
Tubes, welded: aluminum

3354 Aluminum Extruded Products

Establishments primarily engaged in extruding aluminum and aluminum base alloy basic shapes such as rod and bar, pipe and tube, and tube blooms, including establishments producing tube by drawing.

Bars, aluminum: extruded
Coils, rod: aluminum—extruded
Extruded shapes, aluminum
Pipe, aluminum: extruded

Rods, aluminum: extruded
Tube, aluminum: extruded or drawn
Tube blooms, aluminum: extruded

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ROLLING, DRAWING, AND EXTRUDING OF NONFERROUS METALS—Continued**3355 Aluminum Rolling and Drawing, Not Elsewhere Classified**

Establishments primarily engaged in rolling, drawing, and other operations resulting in the production of aluminum ingot, including extrusion ingot, and aluminum and aluminum base alloy basic shapes, not elsewhere classified, such as rolled and continuous cast rod and bar. Establishments primarily engaged in producing aluminum powder, flake and paste are classified in Industry 3399, and those producing aluminum wire and cable from purchased wire bars, rods, or wire are classified in Industry 3357.

Bars, aluminum: rolled
Cable, aluminum: made in rolling mills
Coils, wire: aluminum—made in rolling mills
Extrusion ingot, aluminum: made in rolling mills

Ingot, aluminum: made in rolling mills
Rods, aluminum: rolled and drawn
Rods, aluminum: rolled
Slugs, aluminum
Structural shapes, rolled aluminum
Wire, aluminum: made in rolling mills

3356 Rolling, Drawing, and Extruding of Nonferrous Metals, Except Copper and Aluminum

Establishments primarily engaged in rolling, drawing, and extruding nonferrous metals other than copper (Industry 3351), and aluminum (Industries 3353, 3354, and 3355). The products of this industry are produced in the form of basic shapes such as plate, sheet, strip, bar, and tubing. Establishments primarily engaged in recovering nonferrous metals and alloys from scrap or dross are classified in Industry 3341; in manufacturing gold, silver, tin, and other foils except aluminum in Industry 3497; and aluminum foil in Industry 3353.

Battery metal
Britannia metal, rolling and drawing
Extruded shapes, nonferrous metals and alloys, except copper and aluminum
Gold and gold alloy bars, sheets, strip, and tubing
Gold rolling and drawing
Lead and lead alloy bars, pipe, plates, rods, sheets, strip, and tubing
Lead rolling, drawing, and extruding
Magnesium and magnesium alloy bars, rods, shapes, sheets, strip and tubing
Magnesium rolling, drawing, and extruding
Nickel and nickel alloy pipe, plates, sheets, strips, and tubing
Nonferrous rolling, drawing, and extruding: except copper and aluminum
Platinum and platinum alloy sheets and tubing

Platinum-group metals rolling, drawing, and extruding
Silver and silver alloy bars, rods, sheets, strip, and tubing
Silver rolling and drawing
Soldier wire, bar: acid core and rosin core
Tin and tin alloy bars, pipe, rods, sheets, strip, and tubing
Tin rolling and drawing
Titanium and titanium alloy bars, rods, billets, sheets, strip, and tubing
Titanium from sponge
Tungsten basic shapes
Welding rods
Wire, nonferrous except copper and aluminum: made in rolling mills
Zinc and zinc alloy bars, plates, pipe, rods, sheets, tubing, wire, etc.
Zinc rolling, drawing, and extruding
Zirconium and zirconium alloy bars, rods, billets, sheets, strip, tubing

3357 Drawing and Insulating of Nonferrous Wire

Establishments primarily engaged in drawing, drawing and insulating, and insulating wire and cable of nonferrous metals from purchased wire bars, rods, or wire.

Automotive and aircraft wire and cable, nonferrous
Cable, nonferrous: bare, insulated, or armored—m/pcm
Coaxial cable, nonferrous
Communication wire and cable, nonferrous

Magnet wire, insulated
Shipboard cable, nonferrous
Signal and control cable, nonferrous
Weatherproof wire and cable, nonferrous
Wire, nonferrous: bare, insulated, or armored—m/pcm

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NONFERROUS FOUNDRIES (CASTINGS)

This group includes establishments primarily engaged in manufacturing castings and die castings of aluminum, brass, bronze and other nonferrous metals and alloys. These establishments generally operate on a job or order basis, manufacturing castings for sale to others or for interplant transfer. Establishments which produce nonferrous castings and which are also engaged in fabricating operations, such as machining, assembling, etc., in manufacturing a specified product are classified in the industry of the specified product. Nonferrous castings are made to a considerable extent by establishments classified in other industries that operate foundry departments for the production of castings for incorporation, in the same establishment, into such products as machinery, motor vehicles, etc. Establishments primarily engaged in manufacturing iron and steel castings are classified in Group 332.

3361 Aluminum Foundries (Castings)

Establishments primarily engaged in manufacturing castings and die castings of aluminum and aluminum-base alloys.

Aluminum and aluminum-base alloy
castings and die castings
Castings, aluminum
Cooking utensils, cast aluminum
Die castings, aluminum
Foundries, aluminum

Hospital utensils, cast aluminum
Household utensils, cast aluminum
Kitchen utensils, cast aluminum
Machinery castings, aluminum
Pressure cookers, domestic: cast aluminum

3362 Brass, Bronze, Copper, Copper Base Alloy Foundries (Castings)

Establishments primarily engaged in manufacturing castings and die castings of copper and copper base alloy.

Bushings and bearings: brass, bronze,
copper (nonmachined)
Castings: brass, bronze, copper, and
copper base alloy
Copper and copper base alloy castings
and die castings
Die castings: brass, bronze, copper,
and copper base alloy

Foundries: brass, bronze, copper, and
copper base alloy
Machinery castings: brass, copper, and
copper base alloy
Propellers, ship and screw: cast brass,
bronze, copper and copper base

3369 Nonferrous Foundries (Castings), Not Elsewhere Classified

Establishments primarily engaged in manufacturing castings and die castings of nonferrous materials except aluminum, copper, and copper base alloys.

Beryllium castings
Castings, nonferrous metal except aluminum, copper, and copper base alloy
Castings, precision: industrial and aircraft use—cobalt-chromium
Die castings, nonferrous metal except aluminum, copper, and copper alloys
Foundries, nonferrous metals: except aluminum, copper, and copper alloys

Lead wheel balancing weights
Machinery castings, nonferrous except aluminum, copper, and copper alloys
Magnesium castings and die castings
Sash balances, lead
Titanium and titanium alloy castings
White metal castings (lead, antimony, tin)
Zinc die castings

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MISCELLANEOUS PRIMARY METAL PRODUCTS**3398 Metal Heat Treating**

Establishments primarily engaged in heat treating of metal for the trade.

Annealing of metal for the trade
Brasing (hardening) metal for the trade
Burning metal for the trade
Hardening of metal for the trade
Heat treating of metal for the trade

Shot peening—treating steel to reduce fatigue
Stainless steel, brasing (hardening) for the trade
Tempering of metal for the trade

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**339 MISCELLANEOUS PRIMARY METAL PRODUCTS—Continued****3399 Primary Metal Products, Not Elsewhere Classified**

Establishments primarily engaged in manufacturing primary metal products, not elsewhere classified, such as nonferrous nails, brads, and spikes, and metal powder, flakes, and paste.

Aluminum atomized powder
 Balls, steel
 Brads: aluminum, brass, and other
 nonferrous metal and wire
 Flakes, metal
 Iron, powdered
 Laminating steel for the trade
 Nails: aluminum, brass, and other non-
 ferrous metal and wire
 Paste, metal
 Powder, metal: except artists' mate-
 rials

Reclaiming ferrous metals from clay
 Recovery of iron ore from open hearth
 slag
 Silver powder, except artists' materials
 Spikes, aluminum and other non-
 ferrous metal and wire
 Staples, brass and other nonferrous
 metal and wire
 Tacks, brass and other nonferrous
 metal and wire
 Thermite

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Major Group 34.—FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND TRANSPORTATION EQUIPMENT*The Major Group as a Whole*

This major group includes establishments engaged in fabricating ferrous and nonferrous metal products such as metal cans, tinware, hand tools, cutlery, general hardware, nonelectric heating apparatus, fabricated structural metal products, metal forgings, metal stampings, ordnance (except vehicles and guided missiles), and a variety of metal and wire products not elsewhere classified. Certain important segments of the metal fabricating industries are classified in other major groups, such as machinery in Major Groups 35 and 36; transportation equipment, including tanks, in Major Group 37; professional scientific and controlling instruments, watches and clocks in Major Group 38; and jewelry and silverware in Major Group 39. Establishments primarily engaged in producing ferrous and nonferrous metals and their alloys are classified in Major Group 33.

No. No.
Group Industry

341 METAL CANS AND SHIPPING CONTAINERS**3411 Metal Cans**

Establishments primarily engaged in manufacturing metal cans from purchased materials. Establishments primarily engaged in manufacturing foil containers are classified in 3497.

Beer cans, metal
Cans, aluminum
Cans, metal
Containers, metal: food, milk, oil, beer,
general line
Food containers, metal
General line cans, metal
Ice cream cans, metal

Milk cans, metal
Oil cans, metal
Packers' cans, metal
Pails, except shipping and stamped:
metal
Pans, tinned
Tin cans

3412 Metal Shipping Barrels, Drums, Kegs, and Pails

Establishments primarily engaged in manufacturing ferrous and nonferrous metal shipping barrels, drums, kegs, and pails.

Containers, shipping: barrels, kegs,
drums, packages—liquid tight
(metal)
Drums, shipping: steel and other metal

Fluid milk shipping containers, steel
or other metal
Milk (fluid) shipping containers, steel
or other metal
Pails, shipping: metal—except tinned

342 CUTLERY, HAND TOOLS, AND GENERAL HARDWARE**3421 Cutlery**

Establishments primarily engaged in manufacturing cutlery. Establishments primarily engaged in manufacturing table cutlery made entirely of metal are classified in Industry 3914; those manufacturing electric razors in Industry 3834; and those manufacturing hair clippers for human use in Industry 3909, and for animal use in Industry 3923.

Barbers' scissors
Blades, knife and razor
Butchers' knives
Carving sets: except stainless, silver,
silver plated, or other all metal
Cleavers
Clippers, fingernail and toenail
Cutlery, except all metal
Forks, table: except all metal
Hedge shears and trimmers, except
power
Kitchen cutlery
Knife blades
Knife blanks

Knives: butchers', hunting, pocket,
table, etc.—except all metal and elec-
tric
Potato peelers, hand
Razors: safety, straight
Safety razor blades
Shears, hand: barbers', manicure, pedi-
cure, tailors', and household
Shears, metal cutting: hand
Snips, tanners'
Swords
Table cutlery, except all metal
Tailors' scissors

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CUTLERY, HAND TOOLS, AND GENERAL HARDWARE—Continued

3423 Hand and Edge Tools, Except Machine Tools and Hand Saws

Establishments primarily engaged in manufacturing files and other hand and edge tools for metalworking, woodworking, and general maintenance. Establishments primarily engaged in manufacturing saws are classified in Industry 3425; and metal cutting dies, power driven hand tools, and attachments and accessories for machine tools in Major Group 35.

Adzes
Awls
Axes
Bits (edge tools for woodworking)
Blow torches
Calking guns
Calking tools, hand
Can openers, except electric
Cane knives
Cant hooks (hand tools)
C-clamps
Chisels
Corn knives
Counterbores and countersinking bits, woodworking
Countersinks
Cutters, glass
Cutting dies: except metal cutting, biscuit cutting, and paper cutting
Drawknives
Drill bits, woodworking
Edge tools for woodworking: augers, bits, gimlets, countersinks, etc.
Engravers' tools, hand
Fence stretchers (hand tools)
Files, including recutting and re-sharpening
Forks: garden, hay and manure, stone and ballast
Garden hand tools
Gauges, woodworking
Grass hooks
Guns, calking
Hammers (hand tools)
Hatchets
Hay knives
Hoes, garden and masons'
Hooks: bush, grass, baling, and husking
Ironworkers' hand tools
Jacks: lifting, screw, and ratchet (hand tools)
Jewelers' hand tools
Knives, agricultural and industrial
Leaf skimmers and swimming pool rakes
Levels, carpenters'

Machetes
Machine knives, except metal cutting
Masons' hand tools
Mattocks (hand tools)
Mauls, metal (hand tools)
Mechanics' hand tools
Mitre boxes, metal
Peavies (hand tools)
Picks (hand tools)
Planes, woodworking: hand
Pliers (hand tools)
Plumbers' hand tools
Post hole diggers, hand
Pruning tools
Frying bars (hand tools)
Pullers: wheel, gear, and bearing (hand tools)
Punches (hand tools)
Putty knives
Rasps, including recutting and re-sharpening
Rules and rulers, metal
Scoops, hand: metal
Scrapers, woodworking: hand
Screw drivers
Scythes
Shovels, hand
Sickles, hand
Sledges (hand tools)
Soldering guns and tools, hand: electric
Soldering iron tips and tiplets
Soldering irons and coppers
Spades, hand
Stone forks (hand tools)
Stonecutters' hand tools
Strapping tools, steel
Test plugs: plumbers' hand tools
Tinner's hand tools, except snips
Tongs, oyster
Tools and equipment for use with sporting arms
Tools, hand: except power driven tools and saws
Trowels
Vises, carpenters'
Wrenches (hand tools)

3425 Hand Saws and Saw Blades

Establishments primarily engaged in manufacturing hand saws and saw blades for hand and power driven saws. Establishments primarily engaged in manufacturing power driven sawing machines are classified in Major Group 35.

Chain type saw blades
Saw blades, for hand or power saws

Saws, hand: metalworking or wood-working

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Group Industry
No. No.**342 CUTLERY, HAND TOOLS, AND GENERAL HARDWARE—Continued****3429 Hardware, Not Elsewhere Classified**

Establishments primarily engaged in manufacturing miscellaneous metal products usually termed "hardware", not elsewhere classified. Establishments primarily engaged in manufacturing bolts and nuts are classified in Industry 3452, nails and spikes in Major Group 33, cutlery in Industry 3421, hand tools in Industry 3423, and pole line and transmission hardware in Major Group 36.

Andirons
Angle irons, hardware
Animal traps, iron and steel: except wire
Bellows, hand
Brackets, iron and steel
Builders' hardware, including locks and lock sets
Cabinet hardware, including locks and lock sets
Car seals, metal
Casket hardware
Casters, industrial
Chain fittings
Chair glides
Clamps, hose
Clamps, metal
Couplings, hose
Crab traps, steel: except wire
Cuffs, leg: iron
Door bolts and checks
Door locks and lock sets
Dow fasteners
Fireplace equipment (hardware)
Furniture hardware, including casters
Handcuffs
Harness hardware
Hinge tubes
Hinges
Horse bits
Ice chests or coolers, portable: except foam plastic

Key blanks
Keys
Ladder jacks, metal
Luggage hardware
Luggage racks, car top
Marine hardware
Metal fasteners, spring and cold rolled steel, not made in rolling mills
Motor vehicle hardware
Nozzles, fire fighting
Nut crackers and pickers, metal
Organ hardware
Padlocks
Parachute hardware
Piano hardware
Pulleys, metal: except power transmission equipment
Rope fittings
Saddlery hardware
Suitcase hardware, including locks
Tackle blocks, metal
Thimbles, wire rope
Time locks
Trimming, trunk: metal
Trunk hardware, including locks
Turnbuckles
Utility carriers, car top
Vacuum bottles and jugs
Vehicle hardware: aircraft, automobile, railroad, etc.

343 HEATING EQUIPMENT, EXCEPT ELECTRIC AND WARM AIR; AND PLUMBING FIXTURES**3431 Enameled Iron and Metal Sanitary Ware**

Establishments primarily engaged in manufacturing enameled iron, cast iron, or pressed metal sanitary ware. Establishments primarily engaged in manufacturing vitreous and semivitreous pottery sanitary ware are classified in Industry 3261; and those manufacturing porcelain enameled kitchen, household, and hospital ware in Industry 3460.

Bathroom fixtures: enameled iron, cast iron, and pressed metal
Bathtubs: enameled iron, cast iron, and pressed metal
Drinking fountains, except mechanically refrigerated: metal
Flush tanks, metal
Laundry tubs, enameled iron and other metal
Lavatories, enameled iron and other metal
Plumbing fixtures: enameled iron, cast iron, and pressed metal

Portable chemical toilets (metal)
Shower stalls, metal
Sinks: enameled iron, cast iron, and pressed metal
Toilet fixtures: enameled iron, cast iron, and pressed metal
Urinals: enameled iron, cast iron, and pressed metal
Water closets: enameled iron, cast iron, and pressed metal

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**343 HEATING EQUIPMENT, EXCEPT ELECTRIC AND WARM AIR; AND PLUMBING FIXTURES—Continued****3432 Plumbing Fixture Fittings and Trim (Brass Goods)**

Establishments primarily engaged in manufacturing plumbing fixture fittings and trim (brass goods). Establishments primarily engaged in the manufacture of steam or water line valves are classified in Industry 3494.

Backflow preventors
Brass goods, plumbers'
Breakers, vacuum: plumbing
(Bubblers, drinking fountain
Cocks, drain
Drains, plumbers'
Faucets, metal
Flush valves
Interceptors, plumbers'
Nozzles, lawn hose

Nozzles, plumbers'
Plumbers' brass goods
Plumbing fixture fittings and trim
(brass goods)
Sanitary pipe fittings (brass goods)
Shower rods
Spigots, metal
Sprinklers, lawn
Stopcocks (plumbers' supplies)
Water traps

3433 Heating Equipment, Except Electric and Warm Air Furnaces

Establishments primarily engaged in manufacturing heating equipment, except electric and warm air furnaces, including gas, oil, and stoker coal fired equipment for the automatic utilization of gaseous, liquid, and solid fuels. Establishments primarily engaged in manufacturing warm air furnaces are classified in Industry 3585; cooking stoves and ranges in Industry 3631; boiler shops primarily engaged in the production of industrial, power and marine boilers in Industry 3448; and industrial process furnaces and ovens in Industry 3567.

Boilers, low-pressure heating: steam
or hot water
Furnaces, domestic: steam or hot
water
Gas burners, domestic
Gas heaters, room
Gas infra-red heating units
Gas-oil burners, combination
Heaters, space: except electric
Heaters, swimming pool: oil or gas
Heating apparatus, except electric or
warm air
Incinerators, metal: domestic and com-
mercial
Kerosene space heaters

Logs, fireplace: gas
Oil burners, domestic and industrial
Radiators, except electric
Range boilers, galvanized iron and
nonferrous metal
Room heaters, except electric
Salamanders, coke and gas burning
Solar heaters
Space heaters, except electric
Stokers, mechanical: domestic and in-
dustrial
Stoves, household: heating—except
electric
Unit heaters, domestic: except electric
Wall heaters, except electric

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FABRICATED STRUCTURAL METAL PRODUCTS**3441 Fabricated Structural Metal**

Establishments primarily engaged in manufacturing fabricated iron and steel or other metal for structural purposes, such as bridges, buildings, and sections for ships, boats and barges. Establishments primarily engaged in manufacturing metal doors, sash, frames, molding, and trim are classified in Industry 3442; and establishments doing fabrication work at the site of construction are classified in Division C.

Barge sections, prefabricated metal
Bridge sections, highway: prefabri-
cated
Expansion joints: iron and steel
(structural shapes)
Floor jacks, metal
Floor posts, adjustable: metal
Gates, dam: metal plate
Highway bridge sections, prefabricated
Joists, open web steel: long-span series

Radio and television towers
Railway bridge sections, prefabricated
Ship sections, prefabricated metal
Steel joists, open web: long-span series
Steel tri-level railroad car racks (for
transporting motor vehicles, etc.)
Structural steel, fabricated
Television towers
Towers, transmission

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Group Industry
No. No.
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FABRICATED STRUCTURAL METAL PRODUCTS—Continued

3442 Metal Doors, Sash, Frames, Molding, and Trim

Establishments primarily engaged in manufacturing ferrous and nonferrous metal and metal covered doors and sash, window and door frames and screens, molding, and trim.

Baseboards, floor: metal
Casements, aluminum
Door frames and sash, metal
Doors, louver: all metal or metal frame
Doors, metal and metal covered
Fire doors, metal and metal covered
Garage doors, overhead: metal
Hangar doors, sheet metal covered
Jalousies, all metal or metal frame
Louwer windows, all metal or metal frame
Moldings and trim, metal and metal covered: except automobile
Rolling doors for industrial buildings and warehouses, metal

Screen doors, metal
Screens, door and window: metal frame
Shutters, door and window: metal and metal covered
Store fronts, prefabricated: metal, except vitreous enameled
Storm doors and windows, metal
Trim and molding, except automobile: metal and metal covered
Weather strip, metal
Window frames and sash, metal and metal covered

3443 Fabricated Plate Work (Boiler Shops)

Establishments primarily engaged in manufacturing power and marine boilers, pressure and nonpressure tanks, processing and storage vessels, heat exchangers, weldments and similar products by the process of cutting, forming and joining metal plates, shapes, bars, sheet, pipe mill products and tubing to custom or standard design for factory or field assembly. Establishments primarily engaged in manufacturing warm air heating furnaces are classified in Industry 3585, other nonelectric heating apparatus except power boilers in Industry 3488, and household cooking apparatus in Industry 3681.

Absorbers, gas
Accumulators (industrial pressure vessels)
Acetylene cylinders
Aftercooler shells
Aftercoolers, steam jet
Air preheaters, nonrotating: plate type
Air receiver tanks, metal plate
Airlocks
Annealing boxes, pots, and covers
Atomic waste casks
Autoclaves, industrial
Baffles
Balls, ladle
Bins, prefabricated metal plate
Boiler shop products: industrial boilers, smokestacks, and steel tanks
Boilers: industrial, power, and marine
Boxes, condenser: metal plate
Breechings, metal plate
Buoys, metal
Cable trays, metal plate
Caissons, metal plate
Cars, for hot metal
Casings, boiler: metal plate
Casings, scroll
Chutes, metal plate
Condensers, barometric
Condensers, steam
Containers, shipping: metal plate (bombs, etc.)—except missile casings
Cooling towers, metal plate
Cryogenic tanks, for liquids and gases: metal plate
Culverts, metal plate
Cupolas, metal plate
Cyclones, industrial: metal plate
Cylinders, pressure: metal plate
Digesters, process: metal plate
Ducting, metal plate
Economizers (boilers)
Evaporators (process vessels), metal plate
Exchangers, heat: industrial, scientific, and nuclear

Farm storage tanks, metal plate
Fermenters (process vessels), metal plate
Floating covers, metal plate
Flumes, metal plate
Forms, collapsible: for tunnels
Fractionating columns, metal plate
Fuel tanks, metal plate
Fumigating chambers, metal plate
Gas holders, metal plate
Gas tanks, metal plate
Heat transfer drives (finned tubing)
High vacuum coaters, metal plate
Hoods, industrial: metal plate
Hooks, crane: laminated plate
Hoppers, metal plate
Housing cabinets for radium, metal plate
Housings, pressure
Hydropneumatic tanks, metal plate
Intercooler shells
Jackets, industrial: metal plate
Kettles (process vessels), metal plate
Knockouts, free water: metal plate
Ladles, metal plate
Liners, industrial: metal plate
Liquid oxygen tanks, metal plate
Melting pots, for metal
Missile silos and components, metal plate
Mixers, for hot metal
Nuclear core structurals, metal plate
Nuclear shielding, metal plate
Oil storage tanks, metal plate
Penstocks, metal plate
Perforating on heavy metal
Pile shells, metal plate
Pipe, large diameter: metal plate—made by plate fabricators
Plate work, fabricated: cutting, punching, bending, and shaping
Precipitators (process vessels), metal plate
Pressure vessels, industrial: metal plate—made in boiler shops

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

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FABRICATED STRUCTURAL METAL PRODUCTS—Continued

3443 Fabricated Plate Work (Boiler Shops)—Continued

Pressurisers and auxiliary equipment,
nuclear: metal plate
Reactor containment vessels, metal
plate
Reactors, nuclear: military and indus-
trial
Retorts, industrial
Rocket casings
Separators, industrial process: metal
plate
Septic tanks, metal plate
Skid tanks, metal plate
Smelting pots and retorts
Smokestacks, boiler plate
Space simulation chambers, metal
plate
Spheres, for liquids or gas: metal
plate
Standpipes
Steam jet aftercoolers
Steam jet inter condensers
Sterilizing chambers, metal plate
Still, pressure: metal plate

Storage tanks, metal plate
Surge tanks, metal plate
Tanks for tank trucks, metal plate
Tanks, metal plate: lined
Tanks, standard and custom fabri-
cated: metal plate—made in boiler
shops
Towers: bubble, cooling, fractionat-
ing—metal plate
Towers, tank: metal plate
Trash racks, metal plate
Troughs, industrial: metal plate
Truss plates, metal
Tunnel lining, metal plate
Tunnels, vacuum: metal plate
Tunnels, wind
Vacuum tanks, metal plate
Vats, metal plate
Vessels, process and storage: metal
plate (made in boiler shops)
Water tanks, metal plate
Weldments

3444 Sheet Metal Work

Establishments primarily engaged in manufacturing sheet metal work for buildings
(not including fabrication work done by construction contractors at the place of con-
struction), and manufacturing sheet metal stovepipes, light tanks, etc.

Air cowls, scoops, or airports (ship
ventilators), sheet metal
Awnings, sheet metal
Blinds, prefabricated: sheet metal
Booths, spray: prefabricated sheet
metal
Canopies, sheet metal
Casings, sheet metal
Coal chutes, prefabricated sheet metal
Cooling towers, sheet metal
Cornices, sheet metal
Culverts, sheet metal
Curtain walls, sheet metal
Door hoods, aluminum
Downspouts, sheet metal
Ducts, sheet metal
Eaves, sheet metal
Elbows, for conductor pipe, hot air
ducts, stovepipe, etc.: sheet metal
Flooring, cellular steel
Flues, stove and furnace: sheet metal
Flumes, sheet metal
Forming machine work for the trade,
except stampings: sheet metal
Forms for concrete, sheet metal
Furnace casings, sheet metal
Furnace flues, sheet metal

Guard rails, highway: sheet metal
Gutters, sheet metal
Hoods, range: sheet metal
Hoppers, sheet metal
Irrigation pipe, sheet metal
Laundry hampers, sheet metal
Machine guards, sheet metal
Mail chutes, sheet metal
Mail collection or storage boxes, sheet
metal
Pile shells, sheet metal
Pipe, sheet metal
Post office collection boxes
Radiator shields and enclosures, sheet
metal
Restaurant sheet metal work
Roof deck, sheet metal
Sheet metal specialties, not stamped
Siding, sheet metal
Skylights, sheet metal
Spouts, sheet metal
Stove boards, sheet metal
Stove pipe and flues, sheet metal
Vats, sheet metal
Ventilators, sheet metal
Wells, light: sheet metal

3446 Architectural and Ornamental Metal Work

Establishments primarily engaged in manufacturing architectural and ornamental
metal work of ferrous and nonferrous metals, such as stairs and staircases, open steel
flooring (grating), fire escapes, grilles, railings, and fences and gates, except those
made from wire. Establishments primarily engaged in manufacturing prefabricated
and portable metal buildings and parts are classified in Industry 3443, and miscellaneous
metal work in Industry 3449.

Acoustical suspension systems, metal
Balconies, ferrous and nonferrous
Bank fixtures, ornamental metal
Bannisters, railings, guards, etc.: made
from pipe
Brasswork, ornamental: structural
Channels, furring
Elevator guide rails
Fences and posts, ornamental iron and
steel
Fire escapes, ferrous and nonferrous

Flagpoles, metal
Flooring, open steel (grating)
Gates, ornamental metal
Gratings (open steel flooring)
Gratings, tread: fabricated metal
Ladders, chain
Ladders, for permanent installation:
metal
Lamp posts
Lintels, light gauge steel

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Group Industry
No. No.**344 FABRICATED STRUCTURAL METAL PRODUCTS—Continued****3446 Architectural and Ornamental Metal Work—Continued**

Ornamental and architectural metal work	Registers, hot air
Partitions and grillework, ornamental metal	Scaffolds, metal (mobile or stationary)
Pipe bannisters, railings, guards, etc.	Stair railings, metal
Purlins, light gage steel	Staircases, prefabricated metal
Railings, prefabricated metal	Stairs, prefabricated metal
	Treads, stair: fabricated metal

3448 Prefabricated Metal Buildings and Components

Establishments primarily engaged in manufacturing prefabricated and portable metal buildings and parts, and prefabricated exterior metal panels.

Buildings, prefabricated and portable: metal	Panels for prefabricated metal buildings
Carports, prefabricated: metal	Portable buildings, prefabricated metal
Docks, prefabricated: metal	Prefabricated buildings, metal
Dwellings, prefabricated or portable: metal	Ramps, prefabricated: metal
Farm buildings, prefabricated or portable: metal	Sections for prefabricated metal buildings
Garages, prefabricated or portable: metal	Silos, metal
Houses, prefabricated or portable: metal	Utility buildings, prefabricated or portable: metal

3449 Miscellaneous Metal Work

Establishments primarily engaged in manufacturing miscellaneous ferrous and non-ferrous metal work, such as metal plaster bases, fabricated bar joists and concrete reinforcing bars.

Bars, concrete reinforcing: fabricated steel	Landing mats, aircraft: metal
Concrete reinforcing steel bars, fabricated	Lath, expanded metal
	Plastering accessories, metal

345 SCREW MACHINE PRODUCTS, AND BOLTS, NUTS, SCREWS, RIVETS, AND WASHERS**3451 Screw Machine Products**

Establishments primarily engaged in manufacturing automatic or hand screw machine products from rod, bar, or tube stock of metal, fiber, plastics or other material. The products of this industry consist of a wide variety of unassembled parts and are usually manufactured on a job or order basis. Establishments primarily engaged in manufacturing standard bolts, nuts, rivets, screws and other industrial fasteners on headers, threaders and nut forming machines are classified in Industry 3452.

Screw machine products: produced on a job or order basis

3452 Bolts, Nuts, Screws, Rivets, and Washers

Establishments primarily engaged in manufacturing bolts, nuts, screws, rivets, washers, formed and threaded wire goods, and special industrial fasteners. Rolling mills engaged in manufacturing similar products are classified in Major Group 33, and establishments primarily engaged in manufacturing screw machine products in Industry 3451.

Bolts, iron and steel	Screw eyes
Cotter pins	Screw hooks
Dowel pins, metal	Screws
Gate hooks	Spring pins
Lock washers	Spring washers
Machine keys	Toggle bolts
Nuts	Washers, metal
Rivets	Wood screws

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**3462 METAL FORGINGS AND STAMPINGS**

This group includes establishments primarily engaged in manufacturing metal forgings or metal stampings. These establishments generally operate on a job or order basis, manufacturing metal stampings or forgings for sale to others or for interplant transfer. Establishments which produce metal stampings or forgings for incorporation in end products produced in the same establishment are classified on the basis of the end product.

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Iron and Steel Forgings

Establishments primarily engaged in manufacturing iron and steel forgings, with or without the use of dies.

Anchors, forged: not made in rolling mills
Anvils, forged: not made in rolling mills
Armor plate, forged iron and steel: not made in rolling mills
Axles, railroad: forged—not made in rolling mills
Bumping posts, railroad: forged—not made in rolling mills
Calks, horseshoe: forged—not made in rolling mills
Chains, forged steel: not made in rolling mills
Crankshafts, forged steel: not made in rolling mills
Forgings, iron and steel: not made in rolling mills

Gears, forged steel: not made in rolling mills
Hammer forgings, not made in rolling mills
Horseshoes, not made in rolling mills
Locomotive wheels, forged: not made in rolling mills
Press forgings, iron and steel: not made in rolling mills
Railroad wheels, axles, frogs, and other equipment: forged—*m/jpm*
Switches, railroad: forged—not made in rolling mills
Upset forgings, iron and steel: not made in rolling mills
Wheels, car and locomotive: forged—not made in rolling mills

3463 Nonferrous Forgings

Establishments primarily engaged in manufacturing nonferrous forgings, with or without the use of dies.

Aluminum forgings
Nonferrous forgings, not made in hot rolling mills

Titanium forgings, not made in hot rolling mills

3465 Automotive Stampings

Establishments primarily engaged in manufacturing automotive stampings, such as body parts, hubs and trim.

Automobile stampings: fenders, tops, hub caps, body parts, trim, etc.
Body parts, automobile: stamped

Moldings and trim, automobile: stamped

3466 Crowns and Closures

Establishments primarily engaged in manufacturing metal crowns and closures.

Bottle caps and tops, stamped metal
Crowns, jar: stamped metal

Jar crowns and tops, stamped metal
Tops, jar: stamped metal

3469 Metal Stampings, Not Elsewhere Classified

Establishments primarily engaged in manufacturing metal stampings and spun products, not elsewhere classified, including porcelain enameled products such as household appliance housings and parts; utensils and consumer stamped and spun products such as cooking and kitchen utensils; and other nonautomotive job stampings.

Appliance parts, porcelain enameled
Architectural panels and parts, porcelain enameled
Ash cans, stamped and pressed metal
Ash trays, stamped metal
Automobile license tags, stamped metal
Bottle openers, stamped metal
Capacitor and condenser cans and cases: stamped metal
Cash and stamp boxes, stamped metal
Chasals, radio and television: stamped
Cookers, pressure: stamped or drawn
Cooking ware, porcelain enameled

Curtain walls for buildings, steel
Electronic enclosures: stamped or pressed
Enameled ware, porcelain: except plumbers' supplies
Fins, tube: stamped metal
Floor tile, stamped metal
Furniture components, porcelain enameled
Garbage cans, stamped and pressed metal
Helmets, steel
Honeycombed metal

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Group Industry
No. No.**346 METAL FORGINGS AND STAMPINGS—Continued****3469 Metal Stampings, Not Elsewhere Classified—Continued**

Household utensils, stamped and pressed metal: except cast aluminum
Ice cream dippers
Ironer parts, porcelain enameled
Kitchen utensils, porcelain enameled
Kitchen utensils, stamped and pressed metal: except cast aluminum
Lunch boxes, stamped metal
Machine parts, stamped and pressed metal
Mail boxes, except collection boxes
Pails, stamped and pressed metal: except tinned and shipping type
Pans, stamped and pressed metal: except tinned
Patterns on metal
Perforated metal, stamped
Perforating on light metal

Porcelain enameled products: except plumbers' supplies
Rigidizing metal
Spinning metal, for the trade
Stamping metal, for the trade
Store fronts, porcelain enameled
Stove parts, porcelain enameled
Table tops, porcelain enameled
Teakettles, except electric: metal
Tool boxes, stamped metal
Utensils: household, commercial, and hospital—porcelain enameled
Utensils: household, commercial, and hospital—metal, except cast aluminum
Washing machine parts, porcelain enameled

347 COATING, ENGRAVING, AND ALLIED SERVICES**3471 Electroplating, Plating, Polishing, Anodizing and Coloring**

Establishments primarily engaged in all types of electroplating, plating, anodizing, coloring, and finishing of metals and formed products for the trade. Most of the work done in this industry is done on materials owned by others.

Anodizing (plating) of metals and formed products, for the trade
Buffing for the trade
Chromium plating of metals and formed products, for the trade
Cleaning and descaling metal products, for the trade
Coloring and finishing of aluminum and formed products, for the trade
Decontaminating and cleaning of missile and satellite parts for the trade
Decorative plating and finishing of formed products, for the trade
Depolishing metal, for the trade

Electroplating steel, for the trade
Electroplating of metals and formed products, for the trade
Finishing metal products and formed products, for the trade
Gold plating, for the trade
Plating of metals and formed products, for the trade
Polishing of metals and formed products, for the trade
Rechroming auto bumpers, for the trade
Sand blasting of metal parts
Tumbling (cleaning and polishing) of machine parts, for the trade

3479 Coating, Engraving, and Allied Services, Not Elsewhere Classified

Establishments primarily engaged in performing the following types of services on metals: (1) enameling, lacquering, and varnishing metal products for the trade; (2) hot dip galvanizing of mill sheets, plates and bars, castings, and formed products fabricated of iron and steel; hot dip coating such items with aluminum, lead, or zinc; retinning cans and utensils; (3) engraving, chasing and etching jewelry, silverware, notarial and other seals, and other metal products for the trade and for job contracting for purposes other than printing; (4) and other metal services, not elsewhere classified. Establishments primarily engaged in electroplating, plating, polishing, anodizing, coloring, and finishing of metals and formed products for the trade are classified in Industry 3471; and those producing porcelain enameled products in Industry 3469.

Bonderizing of metal and metal products, for the trade
Chasing on metals for the trade, for purposes other than printing
Coating and wrapping steel pipe
Coating (hot dipping) of metals and formed products, for the trade
Coating of metals with plastic and resins, for the trade
Coating of metals with silicon, for the trade
Coating, rust preventive
Dipping metal in plastic solution as a preservative, for the trade
Enameling (including porcelain) of metal products, for the trade
Engraving jewelry, silverware and metal for the trade: except printing
Etching on metals for the trade, for purposes other than printing

Galvanizing of iron and steel and end formed products, for the trade
Japanning of metal
Jewelry enameling, for the trade
Lacquering of metal products, for the trade
Name plates: engraved, etched, etc.
Painting (enameling and varnishing) of metal products for the trade
Pan glazing for the trade
Parkerizing
Retinning of cans and utensils, not done in rolling mills
Rust proofing (hot dipping) of metals and formed products, for the trade
Sherardizing of metals and metal products, for the trade
Varnishing of metal products, for the trade

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**348 ORDNANCE AND ACCESSORIES, EXCEPT VEHICLES AND GUIDED MISSILES****3482 Small Arms Ammunition**

Establishments primarily engaged in manufacturing ammunition for small arms having a bore of 30 mm. (or 1.18 inch) and below. Establishments primarily engaged in manufacturing ammunition except for small arms are classified in Industry 3483, blasting and detonating caps and safety fuses in Industry 2892, and fireworks in Industry 2899.

Ammunition and component parts, small arms: 30 mm. and below
Bullet jackets and cores, 30 mm. (or 1.18 inch) and below
Cartridge cases for ammunition, 30 mm. (or 1.18 inch) and below
Cartridges, 30 mm. (or 1.18 inch) and below: empty, blank, loaded
Cores, bullet: 30 mm. (or 1.18 inch) and below
Paper shells, 30 mm. (or 1.18 inch) and below: empty, blank, and loaded

Percussion caps, for ammunition of 30 mm. (or 1.18 inch) and below
Shells, small arms: 30 mm. and below—empty, blank, and loaded
Shot, lead
Shotgun ammunition: empty, blank, and loaded
Wads, ammunition: 30 mm. (or 1.18 inch) and below

3483 Ammunition, Except for Small Arms, Not Elsewhere Classified

Establishments primarily engaged in manufacturing ammunition, not elsewhere classified, or in loading and assembling ammunition over 30 mm. (or over 1.18 inch) for naval, aircraft, antiaircraft, tank, coast, and field artillery; including component parts. This industry also includes establishments primarily engaged in manufacturing bombs, mines, torpedoes, grenades, depth charges, chemical warfare projectiles, and their component parts. Establishments primarily engaged in manufacturing small arms ammunition are classified in Industry 3482, explosives in Industry 2892; and military pyrotechnics in Industry 2899.

Ammunition and component parts, over 30 mm. (or over 1.18 inch)
Ammunition loading and assembling plants
Arming and fusing devices for missiles
Bag loading plants, ammunition
Bazooka rockets
Bomb loading and assembling plants
Bombcluster adapters
Bombs and parts
Boosters and burners
Canisters, ammunition
Caps, bomb
Chemical warfare projectiles and components
Depth charges and parts (ordnance)
Detonators for ammunition over 30 mm. (or over 1.18 inch)
Detonators: mine, bomb, depth charge, and chemical warfare projectile
Fin assemblies, mortar: over 30 mm. (or over 1.18 inch)
Fin assemblies, torpedo and bomb
Forgings, projectile: machined—for ammunition over 30 mm.

Fuses for ammunition over 30 mm. (or over 1.18 inch)
Fuses: mine, torpedo, bomb, depth charge, and chemical warfare projectile
Grenades and parts
Jet propulsion projectiles, complete
Loading and assembling bombs, powder bags, and shells: over 30 mm.
Mines and parts (ordnance)
Missile warheads
Mortar shells, over 30 mm. (or over 1.18 inch)
Primers for ammunition, over 30 mm. (or over 1.18 inch)
Projectile forgings, machined: for ammunition over 30 mm.
Projectiles, chemical warfare
Rockets (ammunition)
Shells, artillery: over 30 mm. (or over 1.18 inch)
Torpedoes and parts (ordnance)
Tracer igniters for ammunition over 30 mm. (or over 1.18 inch)

3484 Small Arms

Establishments primarily engaged in manufacturing small firearms having a bore 30 mm. (or 1.18 inch) and below, and parts for small firearms. Also included in this industry are establishments primarily engaged in manufacturing certain weapons over 30 mm. which are carried and employed by the individual, such as grenade launchers and heavy field machine guns. Establishments primarily engaged in manufacturing artillery and mortars having a bore over 30 mm. (or over 1.18 inch), and component parts, are classified in Industry 3489.

Barrels, gun: 30 mm. (or 1.18 inch) and below
Carbines, 30 mm. (or 1.18 inch) and below

Carts, machine gun and machine gun ammunition
Clips, gun: 30 mm. (or 1.18 inch) and below

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Group Industry
No. No.**348 ORDNANCE AND ACCESSORIES, EXCEPT VEHICLES AND GUIDED MISSILES—Continued****3484 Small Arms—Continued**

Cylinders and clips, gun: 30 mm. (or 1.18 inch) and below
 Firearms, 30 mm. (or 1.18 inch) and below
 Grenade launchers
 Gun sights, except optical: 30 mm. (or 1.18 inch) and below
 Guns, 30 mm. (or 1.18 inch) and below
 Links, for ammunition 30 mm. (or 1.18 inch) and below
 Machine gun belts, metallic: 30 mm. (or 1.18 inch) and below
 Machine guns and parts, 30 mm. (or 1.18 inch) and below

Magazines, gun: 30 mm. (or 1.18 inch) and below
 Mounts, for guns 30 mm. (or 1.18 inch) and below
 Pistols and parts, except toy
 Pyrotechnic pistols and projectors
 Recoil mechanisms for guns, 30 mm. (or 1.18 inch) and below
 Revolvers and parts
 Rifles and parts, 30 mm. (or 1.18 inch) and below
 Rifles, high compression pneumatic: 30 mm. (or 1.18 inch) and below
 Shotguns and parts
 Submachine guns and parts

3489 Ordnance and Accessories, Not Elsewhere Classified

Establishments primarily engaged in manufacturing ordnance and accessories, not elsewhere classified, such as naval, aircraft, antiaircraft, tank, coast, and field artillery having a bore over 30 mm. (or over 1.18 inch), and components. Establishments primarily engaged in manufacturing small arms and parts 30 mm. (or 1.18 inch) and below are classified in Industry 3484; tanks in Industry 3795; and guided missiles in Group 376.

Antisubmarine projectors (ordnance)
 Artillery, over 30 mm.: aircraft, anti-aircraft, field, naval, and tank
 Artillery parts, for artillery over 30 mm. (or over 1.18 inch)
 Barrels, gun: over 30 mm. (or over 1.18 inch)
 Bazookas (rocket projectors)
 Bofors guns
 Carriages, gun: for artillery over 30 mm. (or over 1.18 inch)
 Catapult guns
 Depth charge release pistols and projectors
 Flame throwers (ordnance)
 Gun sights, except optical: for guns over 30 mm. (or over 1.18 inch)
 Gun turrets and parts for artillery over 30 mm. (or over 1.18 inch)
 Guns, over 30 mm. (or over 1.18 inch)
 Hispano Suisa guns
 Howitzers, over 30 mm. (or over 1.18 inch)

Limbers, gun and caisson
 Links, for ammunition over 30 mm. (or over 1.18 inch)
 Livens projectors (ordnance)
 Mortars, over 30 mm. (or over 1.18 inch)
 Oerlikon guns
 Pistols, depth charge release
 Pontiac guns
 Projectors: antisub, depth charge release, grenade, livens, and rocket
 Recoil mechanisms for guns over 30 mm. (or over 1.18 inch)
 Rifles, recoilless
 Rocket projectors
 Smoke generators (ordnance)
 Tampons, for guns over 30 mm. (or over 1.18 inch)
 Torpedo tubes (ordnance)
 Y-guns (ordnance)

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MISCELLANEOUS FABRICATED METAL PRODUCTS**3493 Steel Springs, Except Wire**

Establishments primarily engaged in manufacturing leaf springs, hot wound springs, and coiled flat springs. Establishments primarily engaged in manufacturing wire springs are classified in Industry 3495.

Automobile springs
 Coiled flat springs
 Flat springs, sheet or strip stock
 Helical springs, hot wound: for railroad equipment, vehicles, etc.
 Hot wound springs, except wire springs

Leaf springs: automobile, locomotive, and other vehicle
 Railroad equipment springs
 Steel springs, except wire
 Torsion bar springs

3494 Valves and Pipe Fittings, Except Plumbers' Brass Goods

Establishments primarily engaged in manufacturing pipe fittings and valves for controlling the flow of liquids or gases in pipes and mains, and for machinery. Establishments primarily engaged in manufacturing faucets, spigots, and similar plumbers' brass goods and fittings are classified in Industry 3432, flexible metal hose and tubing in Industry 3509; and fittings and couplings for garden hose in Industry 3429.

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

349 MISCELLANEOUS FABRICATED METAL PRODUCTS—Continued

3494 Valves and Pipe Fittings, Except Plumbers' Brass Goods—Continued

<p>Boiler couplings and drains Boiler gage cocks, metal Control valves, steering: for ships Couplings, pipe: except pressure and soil pipe Elbows, pipe: except pressure and soil pipe Electrohydraulic servo valves, metal Expansion joints for piping systems, metal Flanges and flange unions, pipe Gas valves and parts, metal Line strainers, for use in piping systems Pipe fittings, except plumbers' brass goods: metal Pipe hangers Pipe joints, expansion metal: for base-board heating Pressure regulators, metal Process control regulator valves Range valves, metal Reducer returns, pipe</p>	<p>Reducing valves (steam fittings) Regulators (steam fittings) Shutoff valves Solenoid valves Sprinkler systems, field Steam fittings and specialties, except plumbers' brass goods and fittings Steam traps Thermodynamic steam traps Thermostatic traps, heating Valves, air ventilating: metal Valves and pipe fittings, metal Valves, automatic control Valves, hydraulic and pneumatic control Valves, line: steam, water, oil, and machinery—except plumbers' brass Valves, poppet: metal Water valves, except plumbers' brass goods and fittings Well adapters, nipples: brass Y-bends and branches, pipe</p>
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3495 Wire Springs

Establishments primarily engaged in manufacturing wire springs. Establishments primarily engaged in assembling wire bedsprings or seats are classified in Major Group 25.

<p>Clock springs, precision: made from purchased wire Furniture springs, unassembled: made from purchased wire Gun springs, precision: made from purchased wire Instrument springs, precision: made from purchased wire Mechanical springs, precision: made from purchased wire</p>	<p>Sash balances, spring Spring units for seats, made from purchased wire Springs, except complete bed springs: made from purchased wire Upholstery springs, unassembled: made from purchased wire</p>
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3496 Miscellaneous Fabricated Wire Products

Establishments primarily engaged in manufacturing miscellaneous fabricated wire products from purchased wire, such as noninsulated wire rope and cable; fencing; screening, netting, paper machine wire cloth; hangers, paper clips, kitchenware, and wire carts. Rolling mills engaged in manufacturing wire products are classified in Major Group 33; establishments manufacturing nonferrous wire nails and spikes in Industry 3399; those drawing and insulating nonferrous wire in Industry 3357; and those manufacturing wire springs in Industry 3495.

<p>Antisubmarine and torpedo nets, made from purchased wire Barbed wire, made from purchased wire Baskets, made from purchased wire Belts, conveyor: made from purchased wire Belts, drying: made from purchased wire Bird cages, made from purchased wire Bottle openers, made from purchased wire Cable, uninsulated wire: made from purchased wire Cages, wire: made from purchased wire Carts, grocery: made from purchased wire Chain, welded: made from purchased wire Chain, wire: made from purchased wire Clips and fasteners, made from purchased wire Cloth, woven wire: made from purchased wire Concrete reinforcing mesh, made from purchased wire</p>	<p>Cylinder wire cloth, made from purchased wire Delivery cases, made from purchased wire Diamond cloth, made from purchased wire Door mats, made from purchased wire Fabrics, woven wire: made from purchased wire Fencing, made from purchased wire Florists' designs, made from purchased wire Fourdrinier wire cloth, made from purchased wire Gates, fence: made from purchased wire Grilles and grillework, woven wire: made from purchased wire Guards, made from purchased wire Hangers, garment: made from purchased wire Hardware cloth, woven wire: made from purchased wire Hog rings, made from purchased wire Insect screening, woven wire: made from purchased wire Key rings, made from purchased wire Keys, can: made from purchased wire</p>
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Group Industry
No. No.
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MISCELLANEOUS FABRICATED METAL PRODUCTS—Continued**3496 Miscellaneous Fabricated Wire Products—Continued**

Kitchen wire goods, made from purchased wire
Lamp frames, wire: made from purchased wire
Lath, woven wire: made from purchased wire
Mats and matting, made from purchased wire
Mesh, made from purchased wire
Netting, woven wire: made from purchased wire
Paper clips and fasteners, made from purchased wire
Paper machine wire cloth, made from purchased wire
Partitions and grillework, made from purchased wire
Postal screen wire equipment: m/spm
Potato mashers, made from purchased wire
Poultry netting, made from purchased wire
Rods, gas welding: made from purchased wire

Rope, uninsulated wire: made from purchased wire
Screening, woven wire: made from purchased wire
Sieves, made from purchased wire
Skid chains, made from purchased wire
Slings, lifting: made from purchased wire
Spiral cloth, made from purchased wire
Staples, wire: made from purchased wire
Strand, uninsulated wire: made from purchased wire
Ties, bale: made from purchased wire
Tire chains, made from purchased wire
Traps, animal and fish: made from purchased wire
Trays, made from purchased wire
Wire and wire products m/spm: except insulated wire, and nails and spikes
Wire, concrete reinforcing: made from purchased wire
Wire winding of purchased wire
Woven wire products, made from purchased wire

3497 Metal Foil and Leaf

Establishments primarily engaged in manufacturing gold, silver, tin, and other metal foil (including converted metal foil) and leaf. Also included are establishments primarily engaged in converting metal foil (including aluminum) into wrappers, cookware, dinnerware and containers, except bags and liners. Establishments primarily engaged in manufacturing plain aluminum foil are classified in Industry 3353.

Copper foil, not made in rolling mills
Foil containers for bakery goods and frozen foods, except bags and liners
Foil, except aluminum: not made in rolling mills
Foil, laminated to paper or other materials
Gold beating (manufacturing of gold leaf and foil)
Gold foil and leaf, not made in rolling mills

Lead foil, not made in rolling mills
Leaf: gold, silver, and other metals
Magnesium and magnesium base alloy foil, not made in rolling mills
Nickel foil, not made in rolling mills
Platinum and platinum base alloy foil
Silver foil and leaf
Tin foil, not made in rolling mills
Zinc foil, not made in rolling mills

3498 Fabricated Pipe and Fabricated Pipe Fittings

Establishments primarily engaged in fabricating pipe and pipe fittings from purchased pipe, by cutting, threading, bending, etc. Establishments primarily engaged in manufacturing cast iron pipe and fittings, including cast and forged pipe fittings which have been machined and threaded, are classified in Industry 3321; and welded and heavy riveted pipe and seamless steel pipe in Industry 3317. Establishments primarily engaged in manufacturing products such as bannisters, railings and guards from pipe are classified in Industry 3446.

Bends, pipe: fabricated from purchased pipe
Colls, pipe: fabricated from purchased pipe
Couplings, pipe: fabricated from purchased pipe
Manifolds, pipe: fabricated from purchased pipe
Nipples, pipe: except pressure and soil pipe
Pipe and fittings, fabricated from purchased pipe

Pipe, fabricated from purchased pipe
Pipe headers, welded: fabricated from purchased pipe
Piping systems for pulp, paper, and chemical industries
Sections, pipe: fabricated from purchased pipe
Tube fabricating (contract bending and shaping)

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349 MISCELLANEOUS FABRICATED METAL PRODUCTS—Continued

3499 Fabricated Metal Products, Not Elsewhere Classified

Establishments primarily engaged in manufacturing fabricated metal products, not elsewhere classified, such as fire or burglary resistive steel safes and vaults and similar fire or burglary resistive products; and collapsible tubes of thin flexible metal. Also included are establishments primarily engaged in manufacturing metal boxes, metal ladders, and metal household articles, such as ice cream freezers and ironing boards. Establishments primarily engaged in manufacturing concrete grave vaults are classified in Industry 3272, and metal grave vaults in Industry 8995. Establishments primarily engaged in manufacturing advertising novelties are classified in Industry 3903.

Aerosol valves, metal
Ammunition boxes, metal
Aquarium accessories, metal
Automobile seat frames, metal
Bank chests, metal
Barricades, metal
Book ends, metal
Boxes for packing and shipping, steel
Chair frames, metal
Chests, fire or burglary resistive: steel
Collapsible tubes for viscous products
Doors, safe and vault: iron and steel
Drain plugs, magnetic
Drill stands
Ferrules, nonferrous
Fountains, metal (except drinking)
Friction material, made from powdered metal
Furniture parts, chrome
Hoops, steel: other than wire
Humidifiers, household furnace
Ice cream freezers, household: metal
Ironing boards, metal
Ladder assemblies, combination work-stand: metal
Ladders, metal: portable
Linings, safe and vault: iron and steel

Locks, safe and vault
Machine bases, metal
Magnets, permanent: metallic
Marine horns, compressed air or steam
Money chests, steel
Novelties and specialties, metal: except advertising novelties
Plugs, drain: magnetic
Reels, cable: metal
Safe deposit boxes and chests, iron and steel
Safes, iron and steel
Shims, metal
Spray nozzles, aerosol
Stabilizing bars (cargo), metal
Strapping, steel
Tablets, bronze
Target drones for use by ships, under-water and above water: metal
Trophies, metal: except silver, nickel silver, pewter, and plated
Vault doors and linings, iron and steel
Vaults, except grave vaults: iron and steel
Wheels: wheelbarrow, stroller, lawn mower, etc.—disc type, stamped metal

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Major Group 35.—MACHINERY, EXCEPT ELECTRICAL*The Major Group as a Whole*

This major group includes establishments engaged in manufacturing machinery and equipment, other than electrical equipment (Major Group 36) and transportation equipment (Major Group 37). Machines powered by built-in or detachable motors ordinarily are included in this major group, with the exception of electrical household appliances (Major Group 36). Portable tools, both electric and pneumatic powered, are included in this major group, but hand tools are classified in Major Group 34.

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ENGINES AND TURBINES**3511 Steam, Gas, and Hydraulic Turbines and Turbine Generator Set Units**

Establishments primarily engaged in manufacturing steam turbines; hydraulic turbines; gas turbines, except aircraft; complete steam, gas, and hydraulic turbine generator set units; and steam engines. Establishments primarily engaged in building or rebuilding locomotives are classified in Industry 3743; and those manufacturing non-automotive type generators which are not part of a turbine generator set in Industry 3621.

Gas turbines, mechanical drive
Governors, steam
Hydraulic turbines
Steam engines, except locomotives
Steam turbines
Turbine generator set units, complete:
steam, gas, and hydraulic

Turbines: steam, hydraulic, and gas—
except aircraft type
Turbo-generators
Water wheels and turbines
Wheels, water

3519 Internal Combustion Engines, Not Elsewhere Classified

Establishments primarily engaged in manufacturing diesel, semi-diesel, or other internal combustion engines, not elsewhere classified, for stationary, marine, traction, and other uses. Establishments primarily engaged in manufacturing aircraft engines are classified in Industry 3724; automotive engines (except diesel) in Industry 3714; engine generator sets in Industry 3621; and guided missile and space vehicle propulsion units in Industry 3764.

Controls, remote: for boats
Diesel and semi-diesel engines: for stationary, marine, traction, etc.
Engine starters, pneumatic
Engines and engine parts, military tank
Engines: diesel and semi-diesel and dual fuel—except aircraft
Engines, internal combustion: except aircraft and non-diesel automotive
Gas and diesel engine rebuilding
Governors, diesel engine
Governors, pump: for diesel engines

Internal combustion engines except aircraft and non-diesel automotive
Jet propulsion engines, except aircraft
Marine engines: diesel, semi-diesel, and other internal combustion
Outboard motors
Propelling units, outboard
Radiators, stationary engine
Semi-diesel engines for stationary, marine, traction, or other uses
Tank engines and engine parts, military

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FARM AND GARDEN MACHINERY AND EQUIPMENT**3523 Farm Machinery and Equipment**

Establishments primarily engaged in manufacturing farm machinery and equipment, including wheel tractors, for use in the preparation and maintenance of the soil; planting and harvesting of the crop; preparing crops for market, on the farm; or for use in performing other farm operations and processes. Establishments primarily engaged in manufacturing industrial trucks, tractors, and trailers used for handling materials in industrial plants, depots, and docks are classified in Industry 3537; contractors'

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FARM AND GARDEN MACHINERY AND EQUIPMENT—Continued

3523 Farm Machinery and Equipment—Continued

off-highway tractors are classified in Industry 3581; farm hand tools in Group 342; and garden tractors, lawn mowers and other lawn and garden equipment in Industry 3524.

Agricultural implements and machinery
Ammonia applicators and attachments (agricultural machinery)
Bale throwers
Balers: hay, cotton, etc.
Barn cleaners
Barn stanchions and standards
Blowers and cutters, ensilage
Blowers, forage
Brooders
Calf savers (farm equipment)
Cattle feeding, handling, and watering equipment
Cattle ollers (farm equipment)
Chicken brooders
Cleaning machines for fruits, grains, and vegetables
Clippers, hair: for animal use—hand and electric
Combines (harvester-threshers), self-propelled and pull
Conveyors, farm (agricultural machinery)
Corn pickers and shellers
Cotton pickers and strippers (harvesting machinery)
Cream separators (agricultural equipment)
Crop driers
Crushers, feed (agricultural machinery)
Cultivators (agricultural implements) field and row crop
Curers, tobacco
Cutters, ensilage
Drags (agricultural equipment)
Driers: grain, hay, and seed (agricultural implements)
Dusters, mechanical: agricultural
Elevators, farm
Farm machinery and equipment
Feed grinders, crushers, and mixers (agricultural machinery)
Feeders, chicken
Fertilizing machinery (agricultural machinery)
Field type rotary tillers (agricultural machinery)
Fruit grading, cleaning, and sorting machines
Fruit, vegetable, berry and grape harvesting machines
Gates, holding (farm equipment)
Grading, cleaning, and sorting machines: fruit, grain, and vegetable
Grain drills, including legume planters (agricultural machinery)
Grain grading, cleaning, and sorting machines

Grain stackers
Grinders and crushers, feed (agricultural machinery)
Hair clippers for animal use, hand and electric
Hammer and roughage mills (agricultural machinery)
Harrow: disc, spring, tine, etc.
Harvesting machines
Haying machines: mowers, rakes, loaders, stackers, balers, presses, etc.
Hog feeding, handling, and watering equipment
Hulling machinery, agricultural
Incubators, except laboratory and infant
Land rollers and levelers (agricultural machinery)
Listers
Loaders, farm type (general utility)
Milking machines
Mowers and mower-conditioners, hay
Peanut combines, diggers, packers and threshers (agricultural equipment)
Planting machines, agricultural
Plows, agricultural: disc, moldboard, chisel, etc.
Potato diggers, harvesters, and planters (agricultural machinery)
Poultry brooders, feeders, and waterers
Poultry vision control devices
Presses and balers: hay, cotton, etc.
Rakes, hay (agricultural machinery)
Rotary hoes (agricultural machinery)
Roughage mills (agricultural machinery)
Seeders (agricultural machinery)
Separators, grain and berry (agricultural machinery)
Shears, sheep: power
Shellers, nut (agricultural machinery)
Shredders (agricultural machinery)
Silo fillers (agricultural machinery)
Soil pulverizers and packers (agricultural machinery)
Sorting machines for agricultural products
Sprayers, hand: agricultural
Spraying machines (agricultural machinery)
Spreaders, fertilizer
Tobacco curers
Towers, windmill
Tractors, wheel: farm type
Trailers and wagons, farm
Transplanters
Volume guns (irrigation equipment)
Water troughs
Weeding machines, agricultural
Windrowers, self-propelled and pull

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No. No.**352 FARM AND GARDEN MACHINERY AND EQUIPMENT—Continued****3524 Garden Tractors and Lawn and Garden Equipment**

Establishments primarily engaged in manufacturing lawn mowers, garden tractors, and other lawn and garden equipment used for home lawn and garden care. Also included are establishments primarily manufacturing snowblowers and throwers for residential use. Establishments primarily engaged in manufacturing farm machinery and equipment are classified in Industry 3523; hand lawn and garden shears and pruners in Industry 3421; and other garden hand tools in Industry 3423.

Carts for wagons for lawn and garden
Cultivators (garden tractor equipment)
Grass catchers, lawn mower
Hedge trimmers, electric
Lawn edgers
Lawn mowers, hand and power
Lawn rollers

Loaders (garden tractor equipment)
Rototillers (garden machinery)
Plows (garden tractor equipment)
Snowblowers and throwers, residential
Tractors, garden
Trimmers, hedge: electric

353 CONSTRUCTION, MINING, AND MATERIALS HANDLING MACHINERY AND EQUIPMENT**3531 Construction Machinery and Equipment**

Establishments primarily engaged in manufacturing heavy machinery and equipment used by the construction industries, such as bulldozers; concrete mixers; cranes, except industrial plant type; dredging machinery; pavers; and power shovels. Establishments primarily engaged in manufacturing mining equipment are classified in Industry 3532, and well drilling machinery in Industry 3533.

Aggregate spreaders
Airport construction machinery
Asphalt plants, including travel-mix type
Backfillers, self-propelled
Backhoes
Ballast distributors
Batching plants, bituminous
Batching plants, for aggregate concrete and bulk cement
Blades for graders, scrapers, dozers, and snow plows
Breakers, paving
Buckets: clamshell, concrete, dragline, drag scraper, shovel, etc.
Bulldozers (construction machinery)
Capstans, ship
Carriers, crane
Chip spreaders, self-propelled
Cleaners, catch basin
Compactors, soil: vibratory-pan and vibratory-roller types
Concrete buggies, powered
Concrete grouting equipment
Concrete gunning equipment
Concrete plants
Construction machinery, except mining
Cranes, except industrial plant
Cranes, locomotive
Cranes, ship
Crushers, portable
Derricks, except oil and gas field
Derricks, ship
Distributors (construction machinery)
Ditchers, ladder: vertical boom or wheel
Dozers, tractor mounted: material moving
Draglines, powered
Drags, road (construction and road maintenance equipment)
Dredging machinery
Entrenching machines
Excavators: cable, clamshell, crane, derrick, dragline, power shovel, etc.
Extractors, piling
Finishers and spreaders (construction equipment)

Finishers, concrete and bituminous: powered
Grader attachments, elevating
Graders, road (construction machinery)
Grapples: rock, wood, etc.
Grinders, stone: portable
Hammer mills (rock and ore crushing machines), portable
Hammers, pile driving
Line markers, self-propelled
Loaders, shovel: self-propelled
Locomotive cranes
Logging equipment
Mixers: concrete, ore, sand, slag, plaster, mortar, and bituminous
Mortar mixers
Mud jacks
Pavers
Pile drivers (construction machinery)
Planers, bituminous
Plaster mixers
Plows, earth: heavy duty
Power cranes, draglines, and shovels
Pulverizers, stone: portable
Railway track equipment: rail layers, ballast distributors, etc.
Rakes, land clearing: mechanical
Road construction and maintenance machinery
Rock crushing machinery, portable
Rollers, road: steam or other power
Rollers, sheepfoot and vibratory
Sand mixers
Scarifiers, road
Scrapers (construction machinery)
Screeds and screeding machines
Screeners, portable
Ship cranes and derricks
Ship winches
Shovel loaders, wheel tractor
Shovels, power
Silos, cement (batch plant)
Slag mixers
Snow plow attachments
Soil compactors: vibratory-pan and vibratory-roller types
Spreaders and finishers (construction equipment)

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STANDARD INDUSTRIAL CLASSIFICATION

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**Construction Machinery and Equipment—Continued
EQUIPMENT—Continued****3531 Construction Machinery and Equipment—Continued**

Subgraders, construction equipment
Subsoiler attachments, tractor mounted
Surfacers, concrete grinding
Tampers, powered
Tamping equipment, rail
Teeth, bucket and scarifier
Tractors, contractors' off highway

Tractors, crawler
Tractors, tracklaying
Trucks, off-highway: heavy duty motor
Vibrators for concrete construction
Wellpoint systems
Winches, all types

3532 Mining Machinery and Equipment, Except Oil Field Machinery and Equipment

Establishments primarily engaged in manufacturing heavy machinery and equipment used by the mining industries, such as coal breakers, mine cars, mineral cleaning machinery, concentration machinery, core drills, coal cutters, portable rock drills, and rock crushing machinery. Establishments primarily engaged in manufacturing construction machinery are classified in Industry 3531; well drilling machinery in Industry 3533; and coal and ore conveyors in Industry 3535.

Amalgamators (metallurgical and mining machinery)
Auger mining equipment
Bits, rock: except oil field tools
Cages, mine shaft
Car dumpers, mining
Clarifying machinery, mineral
Classifiers (metallurgical and mining machinery)
Cleaning machinery, mineral
Coal breakers, cutters, and pulverizers
Concentration machinery (metallurgical and mining)
Crushers, stationary
Drills and drilling equipment, mining: except oil field drills
Drills, core
Drills, rock: portable
Dumpers, car: mining
Feeders, ore and aggregate
Flotation machinery (mining machinery)

Grinders, stone: stationary
Hammer mills (rock and ore crushing machines), stationary
Loading machines, underground: mobile
Mineral machinery and equipment
Mining cars and trucks (dollies)
Mining machinery and equipment, except oil field machinery and tools
Ore crushing, washing, screening, and loading machinery
Pellet mills (mining machinery)
Plows, coal
Pulverizers, stone: stationary
Scraper loaders, underground
Screeners, stationary
Sedimentation machinery, mineral
Separating machinery, mineral
Shuttle cars, underground
Stamping mill machinery (mining machinery)
Washers, aggregate and sand

3533 Oil Field Machinery and Equipment

Establishments primarily engaged in manufacturing machinery and equipment for use in oil and gas fields or for drilling water wells.

Bits, rock: oil field tools
Derricks, oil and gas field
Drill rigs, all types
Drilling tools for gas, oil, or water wells

Gas well machinery and equipment
Oil field machinery and equipment
Water well drilling machinery

3534 Elevators and Moving Stairways

Establishments primarily engaged in manufacturing passenger or freight elevators, automobile lifts, dumb waiters, and moving stairways. Establishments primarily engaged in manufacturing commercial conveyor systems and equipment are classified in Industry 3535, and farm elevators in Industry 3523.

Automobile lifts (elevators)
Dumbwaiters
Elevators and elevator equipment, passenger and freight
Elevators, powered (nonfarm)

Escalators, passenger and freight
Lifts (elevators), passenger and freight
Stair elevators: motor powered
Stairways, moving

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CONSTRUCTION, MINING, AND MATERIALS HANDLING MACHINERY AND EQUIPMENT—Continued

3535 Conveyors and Conveying Equipment

Establishments primarily engaged in manufacturing conveyors and conveying equipment for installation in factories, warehouses, mines, and other industrial and commercial establishments. Establishments primarily engaged in manufacturing passenger or freight elevators, dumb waiters, and moving stairways are classified in Industry 3534; and overhead traveling cranes and monorail systems in Industry 3536.

Belt conveyor systems, for general industrial use
Bucket type conveyor systems, for general industrial use
Overhead conveyor systems for general industrial use

Passenger baggage belt loaders
Pneumatic tube conveyor systems for general industrial use

3536 Hoists, Industrial Cranes, and Monorail Systems

Establishments primarily engaged in manufacturing overhead traveling cranes, hoists, and monorail systems for installation in factories, warehouses, and other industrial and commercial establishments.

Aerial work platforms, hydraulic or electric truck or carrier mounted
Automobile wrecker hoists
Boat lifts
Cherry pickers (elevated work platforms)
Cranes, overhead travel
Davits
Go-devils (hydraulic crane, pneumatic tire)

Holisting slings
Hoists, except aircraft loading
Hoists, hand
Hoists, mine
Monorail systems
Stacking machines, automatic
Work platforms, elevated

3537 Industrial Trucks, Tractors, Trailers, and Stackers

Establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, stackers (truck type), and related equipment, used for handling materials on floors and paved surfaces in and around industrial and commercial plants, depots, docks, and terminals. Establishments primarily engaged in manufacturing motor vehicles and motor vehicle type trailers are classified in Group 371; farm type wheel tractors in Industry 3523; wheel tractor shovel loaders and tracklaying tractors in Industry 3531; and wood pallets and skids in Industry 2448.

Adapters for multi-weapon rack loading on aircraft
Aircraft engine cradles
Aircraft loading hoists
Boat cradles
Bomb lifts
Bomb trucks
Cars, industrial: except automotive cars and trucks, and mining cars
Die and strip handlers
Dollies (hand or power trucks), industrial: except mining
Drum cradles
Engine stands and racks, metal
Hoists, aircraft loading
Hoppers, end dump
Hospital dollies
Industrial truck cranes
Laundry containers on wheels, fiberglass

Lift trucks, industrial: fork, platform, straddle, etc.
Pallet assemblies for landing mats
Pallets, metal
Platforms, cargo
Skid boxes, metal
Skids, metal
Stackers, power (industrial truck stackers)
Stacking carts
Stands, ground servicing aircraft
Tables, lift: hydraulic
Tractors, industrial: for use in plants, depots, docks, and terminals
Truck trailers, for use in plants, depots, docks, and terminals
Trucks, industrial (except mining) for freight, baggage, etc.
Tunnel kiln cars

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METALWORKING MACHINERY AND EQUIPMENT

3541 Machine Tools, Metal Cutting Types

Establishments primarily engaged in manufacturing machines, not supported in the hands of an operator when in use, that shape metal by cutting or use of electrical techniques; the rebuilding of such machine tools, and the manufacture of replacement parts for them. Metalworking, or primarily metalworking, machine tools designed primarily for home workshops are also included. Establishments primarily engaged in the manufacture of electric welding equipment are classified in Industry 3623; portable power driven hand tools, in Industry 3546; and gas welding and cutting equipment, and automotive maintenance equipment, in Industry 3549.

Automatic chucking machines
Boring, drilling, and milling machine combinations
Boring machines (machine tools)
Boring mills
Broaching machines
Brushing machines (metalworking machinery)
Buffing and polishing machines (machine tools)
Burnishing machines (machine tools)
Centering machines
Chemical milling machines
Countersinking machines
Cutoff machines
Cutting machines, pipe (machine tools)
Cylinder re boring machines
Deburring machines
Die sinking machines
Drill presses (machine tools)
Drilling machine tools (metal cutting)
Duplicators (machine tools)
Electrical discharge erosion machines
Electrical discharge grinding machines
Electrochemical milling machines
Electrolytic metal cutting machine tools
Electron-discharge metal cutting machine tools
Facing machines
Filing machines, metal (machine tools)
Flange facing machines
Gear chamfering machines (machine tools)
Gear cutting and finishing machines
Gear tooth grinding machines (machine tools)
Grinding machines
Grooving machines (machine tools)
Home workshop machine tools, metalworking
Honing and lapping machines
Jig boring machines
Jig grinding machines
Keyseating machines (machine tools)

Lapping machines
Lathes, metal cutting
Lathes, metal polishing
Machine tool replacement and repair parts, metal cutting types
Machine tools, metal cutting, exotic (chemical, explosive, etc.)
Metal polishing lathes
Milling machines (machine tools)
Pipe cutting and threading machines (machine tools)
Planers, metal cutting (machine tools)
Pointing, chamfering, and burring machines
Polishing and buffing machines (machine tools)
Polishing machines (machine tools)
Plasma process metal cutting machines, except welding machines
Reaming machines
Rebuilt machine tools, metal cutting types
Regrinding machines, crankshaft
Rifle working machines (machine tools)
Sawing and cutoff machines (metal working machinery)
Saws, power (metalworking machinery)
Screw and nut slotting machines
Screw machines, automatic
Shapers and slotters
Shaving machines (metalworking)
Slotting machines (machine tools)
Tapping machines
Threading machines (machine tools)
Turning machines (lathes)
Turret lathes
Ultrasonic assisted grinding machines (metalworking)
Ultrasonic metal cutting machine tools
Valve grinding machines
Vertical turning and boring machines (metal working)

3542 Machine Tools, Metal Forming Types

Establishments primarily engaged in manufacturing machines, not supported in the hands of an operator while in use, for pressing, hammering, extruding, shearing, die casting or otherwise forming metal into shape. This industry also includes rebuilding such machine tools and manufacturing repair parts for them. Establishments primarily engaged in the manufacture of electric welding equipment are classified in Industry 3623; portable power driven hand tools in Industry 3546; rolling mill machinery and equipment in Industry 3547; and gas welding and cutting equipment, and automotive maintenance equipment, in Industry 3549.

Arbor presses
Benders, metal (machines)
Bending and forming machines
Brakes, metal forming
Bulldozers (metalworking machinery)
Can making machines
Chemical explosives metal forming machines

Die casting machines
Drop hammers, for forging and shaping metal
Elastic membrane metal forming machines
Electroforming machines
Extruding machines (machine tools), metal

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METALWORKING MACHINERY AND EQUIPMENT—Continued**3542 Machine Tools, Metal Forming Types—Continued**

Forging machinery and hammers
Hammers, power (forging machinery)
Headers
High energy rate metal forming machines
Knurling machines
Machine tools, metal forming: exotic (chemical, explosion, etc.)
Machine tools, metal forming types: including rebuilding
Magnetic forming machines
Mechanical-pneumatic or hydraulic metal forming machines
Metal deposit forming machines
Nail heading machines
Plasma jet spray metal forming machines
Presses: forming, stamping, punching and sizing (machine tools)

Presses: hydraulic and pneumatic, mechanical and manual
Punching and shearing machines
Rebuilt machine tools, metal forming types
Riveting machines
Rolling machines, thread and spline
Shearing machines, power
Sheet metalworking machines
Shock wave metal forming machines
Spinning lathes
Spinning machines, metal
Spline rolling machines
Spring winding and forming machines
Stretching machines
Swaging machines
Thread rolling machines
Ultrasonically assisted metal forming machines
Upsetters (forging machines)

3544 Special Dies and Tools, Die Sets, Jigs and Fixtures, and Industrial Molds

Establishments commonly known as contract tool and die shops and primarily engaged in manufacturing, on a job or order basis, special tools and fixtures for use with machine tools, hammers, die casting machines, and presses. The products of establishments classified in this industry include a wide variety of special toolings, such as dies; punches; die sets and components, and subpresses; jigs and fixtures; and special checking devices. Establishments primarily engaged in manufacturing molds for die casting and foundry casting; metal molds for plaster working, rubber working, plastic working, glass working and similar machinery are also included. Establishments primarily engaged in manufacturing molds for heavy steel ingots are classified in Industry 3821.

Diamond dies, metalworking
Die sets for metal stamping (presses)
Die springs
Dies and die holders for metal cutting, forming, die casting, etc.
Dies, paper cutting
Dies, plastics forming
Dies, steel rule
Extrusion dies
Forms, metal (molds): for foundry, plastic working machinery, etc.

Industrial molds
Jigs and fixtures (metalworking machinery accessories)
Jigs: inspection, gauging and checking
Punches, forming and stamping
Subpresses, metalworking
Welding positioners (jigs)
Wire drawing and straightening dies

3545 Machine Tool Accessories and Measuring Devices

Establishments primarily engaged in manufacturing cutting tools, machinist's precision measuring tools, and attachments and accessories for machine tools and for other metalworking machinery, not elsewhere classified. Establishments primarily engaged in manufacturing hand tools, except power driven types, are classified in Group 342.

Angle rings
Arbors (machine tool accessories)
Balancing machines (machine tool accessories)
Bits for use on lathes, planers, shapers, etc.
Boring machine attachments (machine tool accessories)
Broaches (machine tool accessories)
Callipers and dividers
Cams (machine tool accessories)
Chasers (machine tool accessories)
Chucks: drill, lathe, and magnetic (machine tool accessories)
Collars (machine tool accessories)
Collets (machine tool accessories)
Comparators (machinists' precision tools)
Counterbores, metalworking

Counterinks and counterink drill combinations (machine tool accessories)
Cutters, milling
Cutting tools and bits, for use on lathes, planers, shapers, etc.
Diamond cutting tools for turning, boring, burnishing, etc.
Diamond dressing and wheel crushing attachments
Dies, thread cutting
Dressers, abrasive wheel: diamond point and other
Drill bits, metalworking
Drill bushings (drilling jig)
Drilling machine attachments and accessories (machine tool accessories)
Drills (machine tool accessories)
Files, machine tool

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry

No. No.

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METALWORKING MACHINERY AND EQUIPMENT—Continued

3545 Machine Tool Accessories and Measuring Devices—Continued

Gauge blocks
Gauges except optical (machine tool accessories)
Headstocks, lathe (machine tool accessories)
Hobs
Honing heads
Hopper feed devices
Knives, shear
Lathe attachments and cutting tools (machine tool accessories)
Letter pins (gauging and measuring)
Loading, unloading, and transfer devices
Machine knives, metalworking
Machine tool attachments and accessories
Mandrels
Measuring tools and machines, machinists' metalworking type
Micrometers
Milling machine attachments (machine tool accessories)

Optical measuring devices
Precision tools, machinists'
Pushers
Reamers, machine tool
Scales, measuring (machinists' precision tools)
Shaping tools (machine tool accessories)
Shear knives
Sockets (machine tool accessories)
Tables, rotary
Taps, machine tool
Threading tools (machine tool accessories)
Tool holders
Tools and accessories for machine tools
Verniers (machinists' precision tools)
Vices, machine (machine tool accessories)
Wheel turning equipment, diamond point and other (tool accessories)

3546 Power Driven Hand Tools

Establishments primarily engaged in manufacturing power driven hand tools, such as drills and drilling tools, pneumatic and snagging grinders, and electric hammers. Establishments primarily engaged in manufacturing automotive maintenance equipment are classified in Industry 3540; those primarily manufacturing machine tools for metal cutting and metal forming (including home workshop tools) which are not supported in the hands of an operator, are classified in Industries 3541 and 3542; and those primarily manufacturing power driven heavy construction or mining hand tools in Group 358.

Attachments for portable drills
Buffing machines, hand: electric
Calking hammers
Cartridge-activated hand power tools
Chain saws, portable
Chipping hammers, electric
Drills (except rock drilling and coring), portable: electric and pneumatic
Drills, hand: electric
Flexible shaft metalworking machines, portable
Grinders, pneumatic and electric: portable (metalworking machinery)

Grinders, snagging
Guns, pneumatic: chip removal
Hammers: portable electric and pneumatic chipping, riveting, calking, etc.
Hand tools, power driven: woodworking or metal working
Masonry and concrete drilling tools, power: portable
Riveting hammers
Saws, portable hand held: power driven—woodworking or metalworking

3547 Rolling Mill Machinery and Equipment

Establishments primarily engaged in manufacturing rolling mill machinery and processing equipment for metal production, such as cold forming mills, structural mills, and finishing equipment.

Bar mills
Billet mills
Blooming and slabbing mills
Cleaning lines, electrolytic (rolling mill equipment)
Cold forming type mills (rolling mill machinery)
Ferrous and nonferrous mill equipment, auxiliary
Finishing equipment, rolling mill
Galvanizing lines (rolling mill equipment)
Levelers, roller (rolling mill equipment)

Mill tables (rolling mill equipment)
Picklers and pickling lines, sheet and strip (rolling mill equipment)
Pipe and tube mills
Rod mills (rolling mill equipment)
Roller levelers (rolling mill machinery)
Rolling mill machinery and equipment
Steel rolling machinery
Straightening machinery (rolling mill equipment)
Structural mills (rolling mill machinery)

MANUFACTURING

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Group Industry
No. No.

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METALWORKING MACHINERY AND EQUIPMENT—Continued**3549 Metalworking Machinery, Not Elsewhere Classified**

Establishments primarily engaged in manufacturing metalworking machinery, not elsewhere classified, such as gas cutting and welding equipment, wire fabricating machinery and equipment, except wire drawing dies, and automotive maintenance machinery and equipment. Establishments primarily engaged in manufacturing metal cutting machine tools, are classified in Industry 3541; metal forming machine tools in Industry 3542; power driven hand tools in Industry 3546; and rolling mill machinery in Industry 3547.

Automotive maintenance equipment
Balancing equipment, automotive wheel (garage equipment)
Coil winding machines for springs
Collars (metalworking machines)
Cradle assemblies (wire making equipment)
Cutting-up lines
Degreasing machines, automotive (garage equipment)
Draw benches
Drawing machinery and equipment, except wire drawing dies
Frame straighteners, automobile (garage equipment)

Marking machines, metalworking
Pack-up assemblies (wheel overhaul)
Pail mills
Propeller straightening presses
Rotary slitters (metalworking machines)
Screw downs and boxes
Screw driving machines
Soldering machines, except hand
Welding and cutting apparatus, except electric, laser, ultrasonic, etc.
Wheel mounting and balancing equipment
Wire drawing and fabricating machinery and equipment, except dies

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SPECIAL INDUSTRY MACHINERY, EXCEPT METALWORKING MACHINERY**3551 Food Products Machinery**

Establishments primarily engaged in manufacturing machinery for use by the food products and beverage manufacturing industries in the preparation, canning, or packaging of food products; and parts and attachments for such machinery. Establishments primarily engaged in manufacturing industrial refrigeration machinery are classified in Group 3558.

Bakery machinery
Biscuit cutters (machines)
Bottling machinery: washing, sterilizing, filling, capping, labeling, etc.
Bread slicing and wrapping machines
Brewers' and maltsters' machinery
Butter making and butter working machinery
Canning and packing machinery, food
Cheese making machinery
Chewing gum machinery
Chocolate processing machinery
Choppers, food: commercial types
Cider presses
Coffee roasting and grinding machines
Condensed and evaporated milk machinery
Confectionery machinery
Corn popping machines, commercial type
Cracker making machines
Cream separators (food products machinery)
Cutters, biscuit (machines)
Dairy products machinery and equipment
Deaerating equipment, for food and beverage processing
Dehydrating equipment, food processing
Dies, biscuit cutting
Distillery machinery
Dough mixing machinery
Food choppers, grinders, mixers, and slicers: commercial type
Food packing and canning machinery
Flour mill machinery

Grain mill machinery
Grinders, food: commercial types
Ice cream manufacturing machinery
Juice extractors, fruit and vegetable: commercial type
Macaroni machinery: for making macaroni, spaghetti, noodles, etc.
Malt mills
Meat grinders
Milk processing machinery
Milk testers
Mills and presses: beet, cider, sugar cane, etc.
Mixers and whippers, electric: for food manufacturing industries
Mixers, feed: except agricultural
Mixers, food: commercial types
Ovens, bakery
Packaging machinery, food products
Packing house machinery
Pasteurizing equipment (dairy machinery)
Peanut roasting machines
Popcorn machines, commercial type
Potato peelers, electric
Presses: cheese, beet, cider, and sugar cane
Sifters (food machinery)
Slicing machines, fruit and vegetable: commercial types
Sterilizers, bottle
Stuffers, sausage
Sugar plant machinery
Testers, milk
Wrapping machines: bread, confectionery, and other food products

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.**355 SPECIAL INDUSTRY MACHINERY, EXCEPT METALWORKING MACHINERY—****Continued****3552 Textile Machinery**

Establishments primarily engaged in manufacturing machinery for the textile industries, including parts, attachments, and accessories. Establishments primarily engaged in manufacturing domestic or industrial sewing machines are classified in Industry 3686.

Beaming machines, textile
Bleaching machinery, textile
Bobbins for textile machinery
Braiding machines, textile
Carbonizing equipment (wool processing machinery)
Card clothing for textile machines
Carding machines, textile
Cloth spreading machines
Combing machines, textile
Creeks, textile machinery
Drawing frames, textile
Drying machines, textile: for stock, yarn, and cloth
Dyeing machinery, textile
Embroidery machines
Finishing machinery, textile
Frames, doubling and twisting (textile machinery)
Garmenting machines, textile
Heddles for loom harnesses, wire
Hosiery machines
Jacquard card cutting machines
Jacquard loom parts and attachments
Knitting machines
Knot tying machines (textile machinery)
Lace and net machines
Lace machine bobbins, wood or metal
Loom bobbins, wood or metal

Looms (textile machinery)
Loopers (textile machinery)
Mercerizing machinery
Napping machines (textile machinery)
Picker machines (textile machinery)
Picker sticks for looms
Printing machinery, textile
Reeds, loom
Rope and cordage machines
Roving machines (textile machinery)
Shuttles for textile weaving
Silk screens, for the textile industry
Slashing machines (textile machinery)
Spindles, textile
Spinning machines, textile
Spools, textile machinery: wood
Textile finishing machinery: bleaching, dyeing, mercerizing, and printing
Textile machinery
Textile machinery parts
Textile turnings and shapes, wood
Thread making machines (spinning machinery)
Tufting machines
Warp and knot tying machines (textile machinery)
Warping machines (textile machinery)
Winders (textile machinery)
Wool and worsted finishing machines
Yarn texturizing machines

3553 Woodworking Machinery

Establishments primarily engaged in manufacturing machinery for sawmills, planing mills, cabinet and furniture makers, pattern makers, and veneer workers. Establishments primarily engaged in manufacturing hand tools such as planes, axes, drawknives, and hand saws are classified in Group 342; and portable power driven hand tools in Industry 3546.

Bandsaws, woodworking
Box making machines, for wooden boxes
Cabinet makers' machinery
Furniture makers' machinery (woodworking)
Jointers (woodworking machines)
Lathes, wood turning: including accessories
Mortisers (woodworking machines)
Pattern makers' machinery (woodworking)
Planers (woodworking machinery)
Planing mill machinery
Sanding machines, except portable floor sanders (woodworking machinery)

Sawmill machines
Saws, power: bench and table (woodworking machinery)—except portable
Scarfing machines (woodworking machinery)
Shapers (woodworking machinery)
Surfacers (woodworking machines)
Tenoners (woodworking machines)
Veneer mill machines
Venetian blind machines (woodworking machinery)
Woodworking machines

3554 Paper Industries Machinery

Establishments primarily engaged in manufacturing machinery for the pulp, paper, and paper product industries. Establishments primarily engaged in manufacturing printing trades machinery are classified in Industry 3555.

Bag and envelope making machinery (paper machinery)
Box making machines, for paper boxes
Coating and finishing machinery, paper
Corrugating machines for paper
Cutting and folding machines, paper
Die cutting and stamping machinery (paper converting machinery)
Folding machines, paper: except office machines

Fourdrinier machines (paper manufacturing machinery)
Paper mill machinery: platens, slitting, waxing, etc.
Paper product machines, except printing machines
Pulp mill machinery
Sandpaper manufacturing machines

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Group Industry
No. No.
355

SPECIAL INDUSTRY MACHINERY, EXCEPT METALWORKING MACHINERY—
Continued

3555 Printing Trades Machinery and Equipment

Establishments primarily engaged in manufacturing machinery and equipment used by the printing and bookbinding trades. Establishments primarily engaged in manufacturing textile printing machinery are classified in Industry 3552.

Advertising and newspaper mats
Blocking wood for engravers
Blocks, engravers': wood
Bookbinders' machines
Bronzing and dusting machines, for the printing trade
Chases and galleys, printers'
Copy holders, printers'
Electrotyping machines
Engraving machinery and equipment (printing trades machinery)
Envelope printing presses
Etching machines (printing trades machinery)
Foundry type, for printing
Gelatin rolls, used in printing
Gravure presses
Intertype machines
Leads, printers'
Linotype machines
Lithographic stones
Mallets, printers'
Mats, advertising and newspaper (matrices)

Monotype machines
Offset plates
Paper ruling and sewing machines (bookbinders' machinery)
Photoengraving machines
Planes, printers'
Plates, metal: engravers'
Presses, printing
Printers' machines and equipment
Printers' plates, of all materials
Rollers, printers'
Rules, printers'
Slugs, printers'
Stereotyping machines
Sticks, printers'
Type cases, printers'
Type casting, founding, and melting machines
Type: lead, steel, brass, copper faced, etc.
Typesetting machines: intertypes, linotypes, monotypes, etc.
Typographic numbering machines

3559 Special Industry Machinery, Not Elsewhere Classified

Establishments primarily engaged in manufacturing special industry machinery, not elsewhere classified, such as smelting and refining equipment, cement making, clay working, cotton ginning, glass making, hat making, incandescent lamp making, leather working, paint making, rubber working, cigar and cigarette making, tobacco working, shoe making, and stone working machinery.

Anodizing equipment (except rolling mill lines)
Boot making and repairing machinery
Brick making machines
Broom making machinery
Cement making machinery
Chemical kilns
Chemical machinery and equipment
Cigarette and cigar making machines
Clay working and tempering machines
Cork working machinery
Control rod drive mechanisms, for use on nuclear reactors
Cryogenic machinery, industrial
Degreasing machines, industrial
Desalination equipment
Die and hub cutting equipment (jewelry manufacturing)
Drying kilns, lumber
Electric photolab plating equipment
Electric screening equipment
Electroplating machinery and equipment, except rolling mill lines
Foundry machinery and equipment
Ginning machines, cotton
Glass making machinery: blowing, molding, forming, grinding, etc.
Hat making and hat renovating machinery
Jewelers' machines
Kilns: cement, wood, and chemical
Lamp making machinery, incandescent

Leather working machinery
Metal finishing equipment for plating, etc. (except rolling mill lines)
Metal pickling equipment, except rolling mill lines
Metal smelting and refining machinery, except furnaces and ovens
Nuclear reactor control rod and drive mechanism
Ozone machines
Paint making machinery
Petroleum refinery equipment
Pharmaceutical machinery
Plastics working machinery
Pottery making machinery
Recorders, watch rate
Rubber products machinery
Rubber working machinery
Scouring machines (tannery equipment)
Shoe making and repairing machinery
Stone working machinery
Synthetic filament extruding machines
Tannery machines
Tile making machines
Tire grooving machines
Tire retreading machinery and equipment
Tobacco products machinery
Trimmers, wallpaper
Wood drying kilns

STANDARD INDUSTRIAL CLASSIFICATION

Group No.	Industry No.
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GENERAL INDUSTRIAL MACHINERY AND EQUIPMENT

3561 Pumps and Pumping Equipment

Establishments primarily engaged in manufacturing pumps and pumping equipment for general industrial use. Establishments primarily engaged in manufacturing measuring and dispensing pumps for gasoline service station use are classified in Industry 3586; and air and gas compressors in Industry 3568.

**Cylinders, pump
Domestic water pumps
Hydrojet marine engine units
Pump jacks and other pumping equip-
ment**

Pumps, except gasoline and oil measuring and dispensing pumps
Pumps, for fluid power systems
Pumps, hydraulic

3502 Ball and Roller Bearings

Establishments primarily engaged in manufacturing ball and roller bearings (including ball or roller bearing pillow block, flange, take up cartridge and hanger units) and parts. Establishments primarily engaged in manufacturing bearings, except ball and roller, are classified in Industry 3508.

Bearings, ball and roller
Flange units for ball or roller bearings
Pillow block units for ball or roller bearings

Race, ball and roller bearing

8563 Air and Gas Compressors

Establishments primarily engaged in manufacturing air and gas compressors for general industrial use. Establishments primarily engaged in manufacturing refrigeration compressors and compressing units are classified in Industry 8585; and pumps and pumping equipment in Industry 8561.

Compressors, air and gas: for general industrial use
Dusting outfits for metal, paints, and chemicals (portable or vehicular)
Paint sprayers
Sprayers, hand: except agricultural

Spraying outfits for metals, paints, and chemicals (compressor units)
Tire inflators, hand or compressor operated
Vacuum pumps, except laboratory

3564 Blowers and Exhaust and Ventilation Fans

Establishments primarily engaged in manufacturing industrial and commercial blowers, industrial and commercial exhaust and ventilating fans, and attic fans. Establishments primarily engaged in manufacturing air-conditioning units are classified in Industry 3585, and free air-circulating fans for use on desks, pedestals, or wall brackets as well as household window-type fans and roll-abouts, kitchen and household ventilating and exhaust fans in Industry 3684.

Air purification and dust collection equipment
Aircurtains (blower)
Attic fans
Blower filter units (furnace blowers)
Blowers, exhaust fans, and air moving equipment
Dust and fume collecting equipment.
Industrial
Exhaust fans, except household and kitchen

Fans, general industrial and commercial, and all attic fans
Filters, air: for furnaces, air conditioning equipment, etc.
Furnace blowers (blower filter units)
Precipitators, electrostatic
Turbo-blowers, industrial
Ventilating, blowing, and exhaust fans: industrial and commercial use

8565 Industrial Patterns

Establishments primarily engaged in manufacturing industrial patterns.

Cores, sand (foundry)
Foundry cores

Foundry patternmaking
Patterns, industrial

3586 Speed Changers, Industrial High Speed Drives, and Gears

Establishments primarily engaged in manufacturing speed changers, industrial high speed drives, and gears. Establishments primarily engaged in manufacturing these items for motor vehicles are classified in Industry 3714, and for aircraft in Industry 3728.

Gears, power transmission: except motor vehicle and aircraft
Reduction gears and gear units for turbines, except auto and aircraft

Speed changers (power transmission equipment)
Torque converters, except motor vehicle

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GENERAL INDUSTRIAL MACHINERY AND EQUIPMENT—Continued

3567 Industrial Process Furnaces and Ovens

Establishments primarily engaged in manufacturing industrial process furnaces, ovens, induction and dielectric heating equipment, and related devices.

Calcining kilns (industrial furnaces)
Ceramic kilns and furnaces
Core baking and mold drying ovens
Dielectric heating equipment
Distillation ovens, charcoal and coke
Driers and redriers, industrial process
Enameling ovens
Furnaces, industrial process
Heat treating ovens
Heating equipment, induction
Heating units and devices, industrial:
electric
Induction heating equipment
Infra-red ovens, industrial
Japanning ovens

Kilns: except cement, chemical, and wood kilns
Lacquering ovens
Metal melting furnaces, industrial:
electric and fuel fired
Ovens, industrial process: except bakery
Paint baking and drying ovens
Radiant heating systems, "industrial process": dryers, cookers, etc.
Rubber curing ovens
Sherardizing ovens
Smelting ovens
Vacuum furnaces and ovens

3568 Mechanical Power Transmission Equipment, Not Elsewhere Classified

Establishments primarily engaged in manufacturing mechanical power transmission equipment and parts, for industrial machinery. Establishments primarily engaged in manufacturing automotive, tank, and tractor power transmission equipment are classified in Industry 3714; aircraft power transmission equipment in Industry 3728; ball and roller bearings in Industry 3562; and speed changers, industrial high speed drives, and gears in Industry 3569.

Ball joints, except automobile and aircraft
Bearings, plain
Belting, chain
Clutches, except vehicle
Collars, shaft (power transmission equipment)
Couplings, shaft: rigid, flexible, universal joint, etc.
Drive chains, bicycle and motorcycle

Joints, swivel: except automobile and aircraft
Joints, universal: except motor vehicle
Pillow blocks, with plain bearings
Pivots, power transmission
Pulleys, power transmission
Railroad journal car bearings
Shafts, flexible
Sprockets (power transmission equipment)

3569 General Industrial Machinery and Equipment, Not Elsewhere Classified

Establishments primarily engaged in manufacturing machinery, equipment, and components for general industrial use, and for which no special classification is provided. Machine shops primarily engaged in producing machine and equipment parts, usually on a job or order basis, are classified in Industry 3569.

Altitude testing chambers
Audiometric examination equipment
Baling machines, for scrap metal, paper, and similar materials
Blast cleaning equipment, dustless: except metalworking
Brake burnishing and washing machines
Bridge and gate machinery, hydraulic
Burnishing and washing machines, brake
Centrifuges, industrial
Compactors (packaging machinery)
Cremating ovens
Driers and reel, fire hose
Engines, atomic
Filter elements, fluid: hydraulic line
Filter systems for home swimming pools
Filters, general line industrial: except internal combustion engine
Filters, pipe line
Fire fighting apparatus, except automotive and chemical
Fire hose, except rubber
Gas producers (machinery)
Gas separators (machinery)
Generators, gas
Generators: steam, liquid oxygen and nitrogen

Heaters, swimming pool: electric
Hose, fire: except rubber
Ice crushers (machinery)
Jacks, hydraulic: for general industrial use
Label moisteners, industrial
Labeling machines, for general industrial use
Liquid automation machinery and equipment
Lubricating systems, centralized
Lubrication equipment, industrial
Lubrication machinery, automatic
Motors, air or hydraulic (fluid power)
Motors, water
Ordnance testing chambers
Ovens, surveillance: for aging and testing powder
Packaging machines, for general industrial use: except food
Powder testing chambers
Presses, metal baling
Purifiers, centrifugal
Reels and racks, fire hose
Rudder actuating hydromotors
Screening and sifting machines, for general industrial use
Screws, jack
Separators for steam, gas, vapor, and air (machinery)

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
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GENERAL INDUSTRIAL MACHINERY AND EQUIPMENT—Continued**3569 General Industrial Machinery and Equipment, Not Elsewhere Classified—Continued**

Sifting and screening machines, for
general industrial use
Steam separators (machinery)
Strainers, pipe line
Temperature testing chambers

Testing chambers: for altitude, tem-
perature, ordnance, power, etc.
Vapor separators (machinery)
Wrapping and packaging machines, ex-
cept food wrapping machines

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OFFICE, COMPUTING, AND ACCOUNTING MACHINES**3572 Typewriters**

Establishments primarily engaged in manufacturing typewriters and parts, includ-
ing coded media typewriters and specialized composing typewriters.

Typewriters and parts

Typewriters, including coded media
and specialized composing type-
writers

3573 Electronic Computing Equipment

Establishments primarily engaged in manufacturing electronic computers and periph-
eral equipment and/or major logical components intended for use in electronic com-
puter systems. Included are general-purpose electronic analog computers, electronic
digital computers, military, ruggedized, and special purpose computers. The electronic
computers may be used for data processing or may be incorporated as components
of control equipment for industrial use, and as components of equipment used in
weapons and weapons systems, space and oceanographic exploration, transportation
and other systems. Electronic computer systems contain high speed arithmetic and
program control units, on-line information storage devices, input/output equipment,
terminals, data communication devices, and punched card equipment. Examples of
input/output equipment are converters (card and/or tape), readers and printers.
Examples of storage devices are magnetic drums and disks, magnetic cores and mag-
netic film memories. In addition to providing technical manuals necessary for the
operation and maintenance of the equipment, establishments in this industry usually
furnish general-purpose computer programs and basic operating systems programs
needed for effective use of the computer system. Establishments primarily producing
rebuilt electronic computers are also included in this industry. Establishments pri-
marily engaged in manufacturing desk calculators, cash registers, accounting machines
and similar equipment, that are operator-paced are classified in Industry 3574; elec-
trical and electronic test equipment in Industry 3825; industrial controls, including
electronic, in Industry 3622; and industrial process instruments in Industry 3823.

Accounting machines using machine-
readable programs
Analog computers
Auxiliary storage units
Calculating machines, electronic: uti-
lizing machine-readable programs
Card punching, sorting, and tabulating
machines
Central processing units for electronic
computing systems
Computing machines, electronic
Converters, digital and analog: except
instrumentation type
Data computing and correcting sys-
tems, electronic
Digital computers
Disk and drum drives and devices,
magnetic
Electronic computing machines

Film reader and digital storage photo-
theodolite devices
Gun data computers
Keypunches: key to tape and key to
disk devices
Magnetic ink readers, sorters, and in-
scribers
Office machine control panels
Paper tape punches and readers
Printers, including strip (computer
peripheral equipment)
Recorders, tape: for data computers
Scanners and readers, optical (input
device)
Speed computers
Storage units, computer
Tabulating machines
Tape transport systems for electronic
computers

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Group Industry
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OFFICE, COMPUTING, AND ACCOUNTING MACHINES—Continued**3574 Calculating and Accounting Machines, Except Electronic Computing Equipment**

Establishments primarily engaged in manufacturing desk calculators, adding and accounting machines, cash registers, and similar equipment. Included are electronic calculating and accounting machines which even when augmented by attachments, or which include program control or have input/output capabilities, must be paced by operator intervention. Establishments primarily engaged in manufacturing electronic computing equipment are classified in Industry 3573; typewriters in Industry 3572; and office duplicating machines and devices, autographic registers, and other office machines in Industry 3579.

Accounting machines, not using machine readable programs
Adding machines
Billing machines
Bookkeeping machines
Calculating machines, not utilizing machine readable programs

Cash registers, including adding machines with cash drawers
Change making machines
Coin counters
Registers, credit account

3578 Scales and Balances, Except Laboratory

Establishments primarily engaged in manufacturing weighing and force measuring machines and devices of all types, except those regarded as scientific apparatus for laboratory and experimental work which are classified in Industry 3811.

Baby scales
Balances: coin-operated, automatic computing, etc., except laboratory
Bathroom scales
Industrial scales
Motor truck scales

Railroad track scales
Scales, including coin-operated and electronic scales
Weighing machines and apparatus: automatic computing, coin-operated, etc.

3579 Office Machines, Not Elsewhere Classified

Establishments primarily engaged in manufacturing office machines and devices, not elsewhere classified. Establishments primarily engaged in manufacturing computing machines are classified in Industry 3573, cash registers in Industry 3574, typewriters in Industry 3572, and photocopy and microfilm equipment in Industry 3861.

Address labeling machines
Addressing machines, plates and plate embossers
Binding machines, plastic and adhesive: for store or office use
Canceling machinery, post office
Check protectors (machines)
Check writing, endorsing, or signing machines
Coin wrapping machines
Collating machines, for store or office use
Dating devices and machines, except rubber stamps
Dictating machines, office types
Duplicating machines
Embossing machines, for store and office use
Envelope stuffing, sealing, and addressing machines
Forms handling equipment, for store and office use
Gummed tape moisteners, for store and office use
Letter folding, stuffing, and sealing machines

List finders, automatic
Mail tying (bundling) machines
Mailing machines
Moisteners, gummed tape: for store and office use
Numbering machines, office and store: mechanical
Paper cutters and trimmers (hand office equipment)
Pencil sharpeners
Perforators (office machines)
Postage meters
Punches, paper: hand
Registers, autographic
Scalers, for gummed tape: hand
Seal presses, notarial, etc.—hand
Shorthand machines
Slip sheeting machines
Sorters, filing: office
Staple removers
Stapling machines, hand or power
Ticket counting machines
Time clocks and time recording devices
Time stamps, containing clock mechanisms
Voting machines

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REFRIGERATION AND SERVICE INDUSTRY MACHINERY**3581 Automatic Merchandising Machines**

Establishments primarily engaged in manufacturing automatic merchandising units, also referred to as vending machines (excluding music, amusement, or gaming machines), and coin-operated mechanisms for such machines.

Locks, coin-operated
Mechanisms for coin-operated machines

Merchandising machines, automatic
Vending machines, for merchandise: coin-operated

REFRIGERATION AND SERVICE INDUSTRY MACHINERY—Continued

3582 Commercial Laundry, Dry Cleaning, and Pressing Machines

Establishments primarily engaged in manufacturing laundry and dry cleaning equipment and pressing machines for commercial and industrial use. Establishments primarily engaged in manufacturing household laundry equipment, including coin-operated washers and driers, are classified in Industry 3633.

Dry cleaning equipment and machinery, commercial
Extractors and driers, commercial
laundry except coin-operated
Feather cleaning and sterilising machinery
Ironers, commercial laundry and dry cleaning

Laundry machinery and equipment, commercial
Pressing machines, commercial laundry and dry cleaning
Rug cleaning, drying and napping machines: commercial laundry
Washing machines, commercial

3585 **Air Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment**

Establishments primarily engaged in manufacturing refrigeration equipment and systems and similar equipment for commercial and industrial use; complete air conditioning units for domestic, commercial, and industrial use; and warm air furnaces, except electric. Establishments primarily engaged in manufacturing soda fountains and beer dispensing equipment and humidifiers and dehumidifiers, except for rooms, are also classified in this industry. Establishments primarily engaged in manufacturing household refrigerators and home and farm freezers are classified in Industry 8682; electric air space heaters in Industry 8684; and electric warm air furnaces and other electric comfort heating equipment in Industry 8690.

Air conditioning condensers and condensing units
Air conditioning units, complete: domestic and industrial
Beer dispensing equipment
Boxes, metal: insulated
Cabinets, show and display: refrigerated
Carbonators, soda water
Cases, show and display: refrigerated
Cold drink dispensing equipment, except coin-operated
Compressors for refrigeration equipment
Coolers, milk and water: electric
Counters and counter display cases, refrigerated
Dehumidifiers, except room: electric

Evaporative condensers (heat transfer equipment)
Fountains, drinking: mechanically refrigerated
Furnaces: gravity air flow
Humidifying equipment, except household furnace or room electric
Ice boxes, industrial: metal or wood
Ice making machinery
Lockers, refrigerated
Refrigeration machinery and equipment, industrial
Room coolers, portable
Showcases, refrigerated
Siphons, soda water
Soda fountains, parts, and accessories
Tanks, soda water

3586 Measuring and Dispensing Pumps

Establishments primarily engaged in manufacturing measuring and dispensing pumps commonly used in service and filling stations for dispensing gasoline, oil, and grease, including grease guns. Establishments primarily engaged in manufacturing pumps and pumping equipment for general industrial use are classified in Industry 3561.

Dispensing and measuring pumps, gasoline and oil

Grease guns (lubricators)

3589 Service Industry Machines, Not Elsewhere Classified

Establishments primarily engaged in manufacturing machines and equipment, not elsewhere classified, for use in service industries, such as floor sanding machines, industrial vacuum cleaners, scrubbing machines, commercial cooking and food warming equipment, and commercial dishwashing machines. Establishments primarily engaged in manufacturing household electrical appliances are classified in Group 368.

Cafeteria food warming equipment
Car washing machinery, including
coin-operated
Carpet sweepers, except household
electric vacuum sweepers

Chock assemblies
Cookers, steam: restaurant type
Cooking equipment, commercial
Dirt sweeping units, industrial
Dishwashing machines, commercial

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Group Industry
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REFRIGERATION AND SERVICE INDUSTRY MACHINERY—Continued

3589 Service Industry Machines, Not Elsewhere Classified—Continued

Floor sanding, washing, and polishing machines: portable (commercial type)
Food warming equipment, commercial
Fryers, commercial: gas
Garbage disposers, commercial
Janitors' carts
Mop wringers
Ovens, cafeteria food warming: portable
Ovens, microwave (cooking equipment): commercial
Pressure cookers, steam: commercial
Sanding machines, floor: portable

Scrubbing machines
Servicing machines, coin-operated: except dry cleaning and laundry
Sewage purification equipment
Sewer cleaning equipment, power
Vacuum cleaners and sweepers, electric: industrial
Water conditioners, for swimming pools
Water filters and softeners, household type
Water purification equipment, household type

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MISCELLANEOUS MACHINERY, EXCEPT ELECTRICAL

3592 Carburetors, Pistons, Piston Rings, and Valves

Establishments primarily engaged in manufacturing carburetors, pistons, piston rings, and valves. Establishments primarily engaged in manufacturing metallic packing are classified in Industry 3293; and those primarily engaged in manufacturing machine repair and equipment parts (except electric), on a job or order basis for others, are classified in Industry 3599.

Carburetors, all types
Pistons and piston rings
Valves, aircraft

Valves, engine
Valves, motor vehicle

3599 Machinery, Except Electrical, Not Elsewhere Classified

Establishments primarily engaged in manufacturing machinery and parts except electrical, not elsewhere classified, such as amusement park equipment, pneumatic and hydraulic cylinders, and flexible metal hose and tubing. This industry also includes establishments primarily engaged in producing or repairing machine and equipment parts, not elsewhere classified, on a job or order basis for others.

Amusement machines and equipment for carnivals
Bellows, industrial: metal
Boiler tube cleaners
Carousels (merry-go-rounds)
Catapults
Chemical milling job shops
Cleaners, boiler tube
Column clamps and shores
Crankshafts and camshafts, machining
Cups, oil and grease: metal
Cylinders: fluid power, hydraulic and pneumatic
Fan forges
Ferris wheels

Filters, internal combustion engine: oil, gasoline, air intake
Grinding castings for the trade
Hose, flexible metallic
Leak detectors, water
Machine shops, jobbing and repair
Pump governors, for gas machines
Riddles, sand (hand sifting or screening apparatus)
Sludge tables
Swage blocks
Ties, form: metal
Tubing, flexible metallic
Weather vanes

Major Group 36.—ELECTRICAL AND ELECTRONIC MACHINERY, EQUIPMENT, AND SUPPLIES

The Major Group as a Whole

This major group includes establishments engaged in manufacturing machinery, apparatus, and supplies for the generation, storage, transmission, transformation, and utilization of electrical energy. The manufacture of household appliances is included in this group, but industrial machinery and equipment powered by built-in or detachable electric motors is classified in Major Group 35. Establishments primarily engaged in manufacturing instruments for indicating, measuring, and recording electrical quantities are classified in Industry 3825.

Group Industry
No. No.

361 ELECTRIC TRANSMISSION AND DISTRIBUTION EQUIPMENT

3612 Power, Distribution, and Specialty Transformers

Establishments primarily engaged in manufacturing power, distribution, instrument, and specialty transformers. Establishments primarily engaged in manufacturing radio frequency or voice frequency transformers, coils, or chokes are classified in Industry 3677, and resistance welder transformers in Industry 3623.

Airport lighting transformers
Autotransformers, electric (power transformers)
Autotransformers for switchboards, except telephone switchboards
Ballasts for lighting fixtures
Control transformers
Current limiting reactors, electrical
Distribution transformers, electric
Doorbell transformers, electric
Electric furnace transformers
Feeder voltage regulators and boosters (electric transformers)
Fluorescent ballasts
Generator voltage regulators, electric
Induction and step type
Ignition transformers
Instrument transformers, except portable
Lighting transformers, fluorescent
Lighting transformers, street and airport

Line voltage regulators
Luminous tube transformers
Machine tool transformers
Ratio transformers
Rectifier transformers
Regulators, transmission and distribution voltage
Signaling transformers, electric
Specialty transformers
Street lighting transformers
Toy transformers
Transformers, electric power
Transformers, for electronic meters
Transformers, reactor
Tripping transformers
Vibrators, interrupter
Voltage regulating transformers, electric power
Voltage regulators, transmission and distribution

3613 Switchgear and Switchboard Apparatus

Establishments primarily engaged in manufacturing switchgear and switchboard apparatus. Important products of this industry include power switches, circuit breakers, power switching equipment, and similar switchgear for general industrial application; switchboards and cubicles, control and metering panels, power fuse mountings, and similar switchboard apparatus and supplies. Establishments primarily engaged in manufacturing industrial controls are classified in Industry 3622, and those manufacturing current-carrying wiring devices in Industry 3643.

Air circuit breakers, with interrupting ratings of over 10,000 amperes
Bus bar structures
Circuit breakers, air: with interrupting ratings of over 10,000 amperes
Circuit breakers, power
Control panels, electric
Cubicles (electric switchboard equipment)
Distribution boards, electric
Distribution cutouts
Fuse clips and blocks, electric
Fuse devices, power: 600 volts and over
Fuse mountings, electric power
Fuses, electric
Generator control and metering panels

Knife switches, electric
Metering panels, electric
Panelboards and distribution boards, electric
Panels, electric control and metering
Power connectors
Power switching equipment
Regulators, power
Switchboard apparatus, except instruments
Switchboards and parts, power
Switches, electric power: except snap, push button, tumbler, and solenoid
Switchgear and switchgear accessories
Time switches, electrical switchgear apparatus

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ELECTRICAL INDUSTRIAL APPARATUS**3621 Motors and Generators**

Establishments primarily engaged in manufacturing electric motors (except starting motors) and power generators; motor generator sets; railway motors and control equipment; and motors, generators, and control equipment for gasoline, electric, and oil-electric buses and trucks. Establishments primarily engaged in manufacturing turbo-generators are classified in Industry 3511, and starting motors and battery charging generators for internal combustion engines in Industry 3604.

Armatures, industrial
Coils, for motors and generators
Collector rings, for motors and generators
Commutators, electric motor
Control equipment for buses and trucks
Converters, frequency (electric generators)
Converters, phase and rotary (electrical equipment)
Dynamoes, electric: except automotive
Dynamotors
Exciter assemblies (motor and generator parts)
Frequency converters (electric generators)
Generating apparatus and parts, electrical: except auto and arc welding
Generator sets: gasoline, diesel, and dual fuel
Generators and sets, electric: except auto, welding and turbo-generators
Generators for gas-electric and oil-electric vehicles
Generators for storage battery chargers, except auto and aircraft

Inverters, rotating: electrical
Motor generator sets, except automotive and turbo-generators
Motor housings
Motors, electric: except starting motors
Power generators
Railway motors and control equipment, electric
Resolvers
Rotary converters (electrical equipment)
Rotor retainers and housings
Rotors, for motors
Servo motors
Slip rings, for motors and generators
Starting equipment, for street cars
Stators, for motors
Storage battery chargers, motor and engine generator type
Synchronous condensers and timing motors, electric
Synchros
Torque motors, electric

3622 Industrial Controls

Establishments primarily engaged in manufacturing motor starters and controllers; control accessories, electronic controls, and other industrial controls. Establishments primarily engaged in manufacturing automatic temperature controls are classified in Industry 3822, and industrial process instruments in Industry 3823.

Armature relays
Brakes, electromagnetic
Controls and control accessories, industrial: electric and electronic
Controls, resistance welder
Electromagnetic clutches and brakes
Marine and navy auxiliary controls
Motor controls, electric
Motor starters and controllers, electric

Positioning controls, electric
Resistors and resistor units, except for electronic end products
Rheostats, except for electronic end products
Solenoid switches (industrial controls)
Timing devices, electronic
Track controls, industrial battery

3623 Welding Apparatus, Electric

Establishments primarily engaged in manufacturing electric welding apparatus and accessories. Establishments primarily engaged in coating welding wire from purchased wire or from wire drawn in the same establishment are also included. Establishments primarily engaged in manufacturing gas welding apparatus are classified in Industry 3549, and laser, electron beam, and ultrasonic welding machines and equipment in Industry 3662.

Arc welders: generator, a.c. and d.c.
Arc welders, transformer-rectifier
Arc welders, transformers (separate)
Electrode holders, for electric welding apparatus
Electrodes, electric welding
Generators (separate), for arc welders
Resistance welders, electric

Seam welding apparatus, electric
Spot welding apparatus, electric
Transformers (separate), for arc welders
Welding apparatus and accessories, electric
Welding wire, bare and coated
Welding wire, electric

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STANDARD INDUSTRIAL CLASSIFICATION

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ELECTRICAL INDUSTRIAL APPARATUS—Continued

3624 Carbon and Graphite Products

Establishments primarily engaged in manufacturing lighting carbons; carbon, graphite, and metal-graphite brushes and brush stock; carbon or graphite electrodes for thermal and electrolytic uses; and other carbon, graphite, and metal-graphite products.

Brush blocks, carbon or molded
graphite
Brushes and brush stock contacts:
carbon, graphite, etc.—electric
Carbon specialties for electrical use

Carbons, electric
Electrodes, for thermal and electrolytic
uses: carbon and graphite
Lighting carbons

3629 Electrical Industrial Apparatus, Not Elsewhere Classified

Establishments primarily engaged in manufacturing industrial and commercial electric apparatus and equipment, not elsewhere classified, such as blasting machines, and fixed and variable capacitors, condensers, and rectifiers for industrial applications. Establishments primarily engaged in manufacturing condensers, capacitors, and rectifiers for electronic end products are classified in Group 367.

Battery chargers, rectifying or non-
rotating
Blasting machines, electrical
Capacitors, a.c.: for motors and fluo-
rescent lamp ballasts
Capacitors, except electronic: fixed and
variable
Condensers, except electronic: fixed
and variable
Condensers for motors and generators
Current collector wheels, for trolley
rigging

Electrochemical generators (fuel cells)
Inverters, nonrotating: electrical
Mercury arc rectifiers (electrical ap-
paratus)
Power conversion units, a.c. to d.c.:
static-electric
Rectifiers (electrical apparatus)
Series capacitors, except electronic
Static elimination equipment, indus-
trial
Thermo-electric generators

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HOUSEHOLD APPLIANCES

3631 Household Cooking Equipment

Establishments primarily engaged in manufacturing household cooking equipment, such as stoves, ranges, and ovens, including both electric and nonelectric types. Establishments primarily engaged in manufacturing household cooking appliances, such as hot plates, grills, percolators, and toasters are classified in Industry 3634. Establishments primarily engaged in manufacturing commercial cooking equipment are classified in Industry 3589.

Barbecues, grills, and broilers for out-
door cooking
Cooking equipment, household
Gas ranges, domestic

Microwave ovens, household
Ovens, household: except portable
Ranges: electric, gas, etc.—household
Stoves, disk

3632 Household Refrigerators and Home and Farm Freezers

Establishments primarily engaged in manufacturing household refrigerators and home and farm freezers. Establishments primarily engaged in manufacturing commercial and industrial refrigeration equipment, packaged room coolers, and all refrigeration compressor and condenser units are classified in Industry 3585, and room dehumidifiers are classified in Industry 3634.

Freezers, home and farm
Ice boxes, household: metal or wood
Refrigerator cabinets, household: met-
al and wood

Refrigerators, mechanical and absorp-
tion: household

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Group Industry
No. No.**363 HOUSEHOLD APPLIANCES—Continued****3633 Household Laundry Equipment**

Establishments primarily engaged in manufacturing laundry equipment such as washing machines, wringers, driers, and ironers for household use. This industry also includes coin-operated washers and driers. Establishments primarily engaged in manufacturing commercial laundry equipment are classified in Industry 3582.

Driers, laundry: household and coin-operated
Dry cleaning and laundry machines, household: including coin-operated
Ironers and mangles, household

Laundry machinery, household and coin-operated
Washing machines, household: including coin-operated
Wringers, domestic laundry

3634 Electric Housewares and Fans

Establishments primarily engaged in manufacturing electric housewares for heating, cooking, and other purposes; and electric fans, including ventilating and exhaust household-type fans. Important products of this industry include electric air heaters, electrically heated bed coverings, blenders, broilers, deep fat fryers, flat irons, food mixers, hot plates, percolators and coffee makers, roasters, toasters, desk and bracket fans, hassock or floor fans, window-type propeller fans, roll-about fans and household and kitchen ventilating and exhaust fans. Establishments primarily engaged in manufacturing industrial and commercial blowers, industrial and commercial exhaust and ventilating fans, and attic fans are classified in Industry 3564.

Bed coverings, electric
Blenders, electric
Blowers, portable: electric
Bottle warmers, household: electric
Broilers, electric
Can openers, electric
Casseroles, electric
Chafing dishes, electric
Cigar lighters, electric
Cigarette lighters, electric
Coffee makers, household: electric
Cooking appliances, household: electric
Curling irons, electric
Deep fat fryers, household: electric
Dehumidifiers: room, electric
Desk fans, electric
Driers: hand, face, and hair—electric
Dry shavers (electric razors)
Egg cookers, electric
Fans, electric: household—exhaust and ventilating, except attic fans
Floor fans, electric
Food mixers, household: electric
Fryers, household: electric
Griddles and grills, household: electric
Hair curlers, electric
Hair driers, electric: except equipment designed for beauty parlor use
Hassock fans, electric
Heaters, immersion: household—electric
Heaters, space: electric
Heaters, tape
Heating pads, electric
Heating units, baseboard or wall: electric (radiant heating element)

Heating units, for electric appliances
Hot plates, electric
Humidifiers, electric: household
Irons, domestic: electric
Juice extractors, electric
Knives, electric
Massage machines, electric: except designed for beauty and barber shop
Ovens, household: portable
Percolators, electric
Popcorn poppers, for home use: electric
Propeller fans, window-type (household)
Radiators, electric
Razors, electric
Roasters, electric
Sandwich toasters and grills, household: electric
Sauna heaters, electric
Shoe polishers, electric
Teakettles, electric
Toasters, household: electric
Toothbrushes, electric
Trouser pressers, electric
Unit heaters, household: electric
Urns, electric
Vaporizers, electric: household
Ventilating fans, electric: household—kitchen
Waffle irons, electric
Wall heaters, household: electric
Water pulsating devices, electric
Whippers, household: electric

3635 Household Vacuum Cleaners

Establishments primarily engaged in manufacturing vacuum cleaners for household use. Establishments primarily engaged in manufacturing vacuum cleaners for industrial use are classified in Industry 3589, and built in vacuum cleaner systems in Industry 1796.

Vacuum cleaners and sweepers, electric: household

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No. Industry
No.**363 HOUSEHOLD APPLIANCES—Continued****3636 Sewing Machines**

Establishments primarily engaged in manufacturing sewing machines for domestic and industrial use.

Bag seaming and closing machines
(sewing machinery)
Button sewing machines
Buttonhole and eyelet machines and
attachments, domestic and industrial

Fur sewing machines
Sewing machines and attachments, domestic and industrial

3639 Household Appliances, Not Elsewhere Classified

Establishments primarily engaged in manufacturing household appliances, not elsewhere classified, such as water heaters, dishwashers, and food waste disposal units.

Dishwashing machines, household
Floor waxers and polishers, household: electric

Garbage disposal units, household
Trash compactors, household
Water heaters, household

364**ELECTRIC LIGHTING AND WIRING EQUIPMENT****3641 Electric Lamps**

Establishments primarily engaged in manufacturing electric bulbs, tubes, and related light sources. Important products of this industry include incandescent filament lamps, vapor and fluorescent lamps, photoflash and photofood lamps, electrotherapeutic lamp units for ultra-violet and infra-red radiation, and other electric light sources. Establishments primarily engaged in manufacturing glass blanks for bulbs are classified in Industry 8229; and lamp components, such as supports, filaments, lead-in wires and cold cathode fluorescent lamp electrodes, in Industry 8699.

Bulbs, electric light: complete
Electrotherapeutic lamp units for
ultra-violet and infra-red radiation
Flashlight bulbs, photographic
Glow lamps
Infra-red lamps
Lamps, electric: incandescent filament,
fluorescent, and vapor
Lamps, health: infra-red and ultra-
violet radiation

Lamps, sealed beam
Light bulbs, electric: complete
Photoflash and photofood lamps
Pilot lights, radio
Strobofloures
Tubes, electric light
Ultra-violet lamps

3648 Current-Carrying Wiring Devices

Establishments primarily engaged in manufacturing current-carrying wiring devices. Important products of this industry include attachment plugs and caps, convenience outlets, lamp sockets and receptacles, snap switches, conductor connectors, overhead trolley line material, rail bonds for both propulsion and signal circuits, lightning arrestors, and other lightning protective equipment.

Bus bars (electrical conductors)
Caps and plugs, attachment: electric
Connectors and terminals for electrical
devices
Contacts, electrical: except carbon and
graphite
Convenience outlets, electric
Cord connectors, electric
Current taps, attachment plug and
screw shell types
Cutouts, switch and fuse
Dial light sockets, radio
Fluorescent starters
Fuse cutouts
Ground clamps (electric wiring de-
vices)

Lamp sockets and receptacles (electric
wiring devices)
Lightning arrestors and coils
Lightning protection equipment
Plugs, electric
Rail bonds, electric: for propulsion and
signal circuits
Snap switches, electric
Sockets, electric
Solderless connectors (electric wiring
devices)
Starting switches, fluorescent
Switch cutouts
Switches: snap, tumbler, pressure, etc.
(electric wiring devices)
Trolley line material, overhead

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Group Industry
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ELECTRIC LIGHTING AND WIRING EQUIPMENT—Continued**3644 Noncurrent-Carrying Wiring Devices**

Establishments primarily engaged in manufacturing noncurrent-carrying wiring devices. Important products of this industry include conduits and fittings; electrical insulators and insulation materials, except porcelain insulators (Industry 8284) and glass insulators (Industry 3229); outlet, switch and fuse boxes; and pole line hardware.

Boxes: junction, outlet, switch, and fuse (electric wiring devices)
Conduits and fittings, electrical
Face plates (wiring devices)
Insulators and insulation materials, electrical: except glass, porcelain

Pole line hardware
Raceways
Snubbers for CATV systems
Terminal boards

3645 Residential Electric Lighting Fixtures

Establishments primarily engaged in manufacturing residential electric lighting fixtures and equipment, fixed or portable. Establishments primarily engaged in producing glassware for lighting fixtures are classified in Major Group 32; electric light bulbs, tubes, and related light sources in Industry 3641; lamp shades except glass and metal in Industry 3909; and nonelectric fixtures and portable electric flashlights, lanterns and similar lamps in Industry 3648.

Boudoir lamps
Chandeliers, residential
Desk lamps, residential
Floor lamps
Fluorescent lighting fixtures, residential
Garden, patio, walkway and yard lighting fixtures: electric

Lamp shades, metal
Lamps (lighting fixtures), residential: electric
Light shades, metal
Lighting fixtures, residential: electric
Lights, yard: electric
Table lamps
Wall lamps

3646 Commercial, Industrial, and Institutional Electric Lighting Fixtures

Establishments primarily engaged in manufacturing commercial, industrial, and institutional electric lighting fixtures. Establishments primarily engaged in producing glassware for lighting fixtures are classified in Major Group 32; residential lighting fixtures in Industry 3645; and vehicular lighting fixtures in Industry 3647.

Chandeliers, commercial
Commercial lighting fixtures
Electroluminescents (lighting fixtures)
Fluorescent lighting fixtures, commercial

Luminous panel ceilings
Ornamental lighting fixtures, commercial

3647 Vehicular Lighting Equipment

Establishments primarily engaged in manufacturing vehicular lighting equipment.

Aircraft lighting fixtures
Automobile headlights and spotlights
Automotive lighting fixtures
Bicycle lamps
Boat and ship lighting fixtures
Clearance lamps and reflectors, motor vehicle
Dome lights, auto
Flasher lights, automobile
Fog lights
Headlights (fixtures) for motor vehicles, locomotives, etc.

Lamps, marker and clearance: motor vehicle
Locomotive and railroad car lights
Marker lamps, motor vehicle
Motorcycle lamps
Parking lights, auto
Reflectors, clearance: motor vehicle
Spotlights, automobile
Streetcar lighting fixtures
Tail lights, motor vehicle

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ELECTRIC LIGHTING AND WIRING EQUIPMENT—Continued**3648 Lighting Equipment, Not Elsewhere Classified**

Establishments primarily engaged in manufacturing lighting fixtures and equipment, electric and nonelectric, not elsewhere classified, including flashlights and similar portable lamps, searchlights, ultra-violet lamp fixtures, and infra-red lamp fixtures. Establishments primarily engaged in manufacturing electric light bulbs, tubes, and related light sources are classified in Industry 3641, and those producing glassware for lighting fixtures are classified in Major Group 32.

Arc lamps, except electrotherapeutic
Area and sports luminaries
Aviation, runway approach, taxi and
ramp lighting fixtures
Decorative area lighting fixtures, ex-
cept residential
Flashlights
Floodlights
Fountain lighting fixtures
Gas lighting fixtures
Lamp fixtures, infra-red
Lanterns: electric, gas, carbide, kero-
sene, and gasoline

Miners' lamps
Public lighting fixtures
Reflectors, for lighting equipment:
metal
Searchlights
Spotlights, except automobile
Stage lighting equipment
Street lighting fixtures, except traffic
signals
Swimming pool lighting fixtures
Ultra-violet lamp fixtures
Underwater lighting fixtures

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**RADIO AND TELEVISION RECEIVING EQUIPMENT, EXCEPT COMMUNICA-
TION TYPES****3651 Radio and Television Receiving Sets, Except Communication Types**

Establishments primarily engaged in manufacturing electronic equipment for home entertainment, including auto radios and tape players. This industry also includes establishments primarily engaged in manufacturing public address systems and music distribution apparatus. Establishments primarily engaged in manufacturing phonograph records and pre-recorded tape are classified in Industry 3652. Establishments primarily engaged in manufacturing separate cabinets for home electronic equipment are classified in Major Group 25.

Amplifiers: radio, public address, or
musical instrument
Audio electronic systems, except com-
munication
Coin-operated phonographs
FM and AM tuners
Home recorders, cassette, cartridge
and reel
Juke boxes
Loudspeakers, electrodynamic and
magnetic
Microphones
Music distribution apparatus, except
records or tape
Musical instrument amplifiers
Phonograph and radio combinations
Phonograph turntables

Phonographs, including coin-operated
Pickup heads, phonograph
Pillows, stereo
Public address systems
Radio and phonograph combinations
Radio receiving sets
Recording machines, music and speech:
except office and industrial
Sound reproducing equipment: except
motion picture
Speaker monitors
Speaker systems
Television receiving sets
Turntables, for phonographs
Video triggers (remote control TV de-
vices)

3652 Phonograph Records and Pre-recorded Magnetic Tape

Establishments primarily engaged in manufacturing phonograph records and pre-recorded magnetic tape. Establishments primarily engaged in manufacturing electronic equipment for home entertainment, except records and pre-recorded magnetic tape, are classified in Industry 3651.

Magnetic tape, pre-recorded
Master records or tapes, preparation of
Phonograph record blanks
Phonograph records (including prepa-
ration of the master)

Pre-recorded magnetic tape
Record blanks, phonograph
Recording studios
Records, phonograph
Tape, magnetic: pre-recorded

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Group Industry
No. No.
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COMMUNICATION EQUIPMENT

3661 Telephone and Telegraph Apparatus

Establishments primarily engaged in manufacturing wire telephone and telegraph equipment, and parts especially designed for telephone and telegraph use.

Autotransformers for telephone switch-
boards
Carrier equipment, telephone and tele-
graph
Communication headgear, telephone
Data sets, telephone and telegraph
Electronic secretary
Headsets, telephone
Message concentrators
PBX equipment, dial and manual
Switchboards, underwater: telephone
and telegraph

Telegraph office switching equipment
Telephone central office equipment, dial
and manual
Telephone dialing devices, automatic
Telephone sets, all types
Telephone station equipment and parts,
wire
Telephones, sound powered (no bat-
tery)
Telephones, underwater
Teletypewriters
Telewriters

3662 Radio and Television Transmitting, Signaling, and Detection Equipment and Apparatus

Establishments primarily engaged in manufacturing (1) radio and television broad-
casting equipment; (2) electric communication equipment and parts, except telephone
and telegraph; (3) electronic field detection apparatus, light and heat emission oper-
ating apparatus, object detection apparatus and navigational electronic equipment,
and aircraft and missile control systems; and (4) high energy particle accelerator
systems and equipment designed and sold as a complete package for radiation therapy,
irradiation, radiographic inspection, and research (linear accelerators, betatrons,
dynamotrons, Vandergraff generators, resonant transformers, insulating core trans-
formers, etc.); (5) high energy particle electronic equipment and accessories sold
separately for the construction of linear accelerators, cyclotrons, synchrotrons, and
other high energy research installations (transmitters/modulators, accelerating wave-
guide structures, pulsed electron guns, vacuum systems, cooling systems, etc.);
(6) other electric and electronic communication and signaling products, not elsewhere
classified. Establishments primarily engaged in manufacturing transmitting tubes are
classified in Industry 3673.

Accelerating waveguide structures
Air traffic control systems and equip-
ment, electronic
Aircraft control systems, electronic
Amplifiers: other than radio, public ad-
dress, and musical instrument
Antennas, radar and communications
Antennas, television transmitting
Atom smasher (particle accelerators)
Betatrons
Broadcasting equipment, radio and tele-
vision
Burglar alarm apparatus, electric
Cleaning equipment, ultrasonic
Communication equipment and parts,
electronic: except telephone, tele-
graph
Communication equipment, mobile and
micro-wave
Control receivers
Countermeasure simulators, electric
Cyclotrons
Detection apparatus: electronic and
magnetic field, and light and heat
Digital encoders
Direction finders, radio
Door opening control devices, radio and
photoelectric cell operated
Dynamotrons
Electron beam metal cutting, forming
and welding machines
Electron beam welders
Electron linear accelerators
Electronic control, detection, or com-
munication systems
Electronic field detection apparatus
Electrostatic particle accelerators

Facsimile equipment, radio
Fire alarm apparatus, electric
Fire control and bombing equipment,
electronic
Flight simulators (training aids), elec-
tronic
Geophysical and meteorological elec-
tronic equipment
Heat emission operating apparatus
Highway signals, electric
Hydrophones
Inertial guidance systems
Infra-red object detection equipment
Instrument landing systems (ILS), air-
borne and ground
Intercommunication systems, electric
Laser systems and equipment, except
scientific and engineering instru-
ments
Light and heat emission operating ap-
paratus
Linear accelerators
Loran equipment
Magnetic amplifiers, except home type
Magnetic field detection apparatus
Marine horns, electric
Maser equipment, all types
Micro-wave communication equipment
Missile control systems
Missile fuel management systems
Mobile communication equipment
Modems, except telephone and tele-
graph data sets
Multiplex equipment
Navigational electronic equipment
(ILS, DME, VOR, TACAN)
Object detection apparatus (radar)

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COMMUNICATION EQUIPMENT—Continued

3662 Radio and Television Transmitting, Signaling, and Detection Equipment and Apparatus—Continued

Particle accelerators, high voltage
Photographic control systems, elec-
tronic
Phototransmission equipment, radio
Pulsed electron guns
Radar equipment
Radio and television switching equip-
ment
Radio antennas (transmitting and re-
ceiving) and ground equipment
Radio compasses
Radio receiver networks
Radio telephone and telegraph equip-
ment, except tubes
Railroad signaling devices, electric
Receiver-transmitter units (transceiver-
er)
RF power amplifiers, and IF ampli-
fiers: sold separately
Satellites
Sighting and fire control equipment,
electronic type
Signaling apparatus, electric
Signals: railway, highway, and traf-
fic—electric

Stress, electric : vehicle, marine, industrial, and air raid
 Sonar equipment
 Sound signaling devices, electrical
 Target signals, synthetic : to operate radar receivers and repeaters
 Telemetering equipment, electronic
 Television antennas (transmitting) and ground equipment
 Television closed circuit equipment
 Television monitors
 Time decoders
 Traffic signals, electric
 Training devices, electronic
 Transmitting apparatus, radio and television : except tubes
 Transponders
 Ultrasonic cleaning equipment
 Ultrasonic generators sold separately for inclusion in tools and equipment
 Ultrasonic welding machines and equipment
 Underwater sound equipment
 Waveguide pressurisation equipment
 Weapon simulators

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ELECTRONIC COMPONENTS AND ACCESSORIES

3671 Radio and Television Receiving Type Electron Tubes, Except Cathode Ray

Establishments primarily engaged in manufacturing radio and television receiving type electron tubes, except cathode ray tubes. Establishments primarily engaged in manufacturing television receiving type cathode ray tubes are classified in Industry 3672; transmitting tubes in Industry 3673; and X-ray tubes in Industry 3693.

**Electron tubes, radio and television
receiving: except cathode ray tubes**

3672 Cathode Ray Television Picture Tubes

Establishments primarily engaged in manufacturing television receiving type cathode ray tubes. Establishments primarily engaged in manufacturing other radio and television receiving type electron tubes are classified in Industry 8671; and transmitting tubes in Industry 8673.

Cathode ray television receiving type
tubes
Picture tube reprocessing

Television receiving type tubes, cathode ray

3673 Transmitting, Industrial, and Special Purpose Electron Tubes

Establishments primarily engaged in manufacturing transmitting, industrial, and special purpose electron tubes. Establishments primarily engaged in manufacturing radio and television receiving tubes are classified in Industry 3671; television receiving type cathode ray tubes in Industry 3672; and X-ray tubes in Industry 3693.

Cathode ray tubes, except television receiving type
Electron beam (beta ray) generator tubes
Electron tubes: transmitting, industrial, and special purpose
Gas and vapor tubes
Geiger Mueller tubes
Industrial electron tubes

Klystron tubes
Light sensing and emitting tubes
Magnetrons
Transmitting electron tubes
Traveling wave tubes
Tubes for operating above the X-ray spectrum (with shorter wavelength)
Vacuum capacitors, relays, and switches

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Group Industry
No. No.
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ELECTRONIC COMPONENTS AND ACCESSORIES—Continued**3674 Semiconductors and Related Devices**

Establishments primarily engaged in manufacturing semiconductor and related solid state devices, such as semiconductor diodes and stacks, including rectifiers, integrated microcircuits (semiconductor networks), transistors, solar cells, and light sensing and emitting semiconductor (solid state) devices.

Computer logic modules
Controlled rectifiers, solid state
Diodes, solid state (germanium, silicon, etc.)
Electronic devices, solid state
Fuel cells, solid state
Gunn effect device
Hall effect devices
Hybrid integrated circuits
Infra-red sensors, solid state
Light emitting diodes
Light sensitive devices, solid state
Magnetic bubble memory device
Magnetohydrodynamic (MHD) devices
Memories, solid state
Metal oxide silicon (MOS) devices
Microcircuits, integrated (semiconductor)
Modules, solid state
Molecular devices, solid state
Monolithic integrated circuits (solid state)
Nuclear detectors, solid state

Parametric diodes
Photoelectric cells, solid state (electronic eye)
Photovoltaic devices, solid state
Rectifiers, solid state
Semiconductor circuit networks (solid state integrated circuits)
Semiconductors (transistors, diodes, etc.)
Solar cells
Solid state electronic devices
Strain gages, solid state
Stud bases or mounts for semiconductor devices
Switches, silicon control
Thermionic devices, solid state
Thermoelectric devices, solid state
Thin film circuits
Transistors
Tunnel diodes
Ultra-violet sensors, solid state
Variable capacitance diodes
Zener diodes

3675 Electronic Capacitors

Establishments primarily engaged in manufacturing electronic capacitors.

Capacitors, electronic: fixed and variable

Condensers, for electronic end products

3676 Resistors, for Electronic Applications

Establishments primarily engaged in manufacturing resistors for electronic end products. Establishments primarily engaged in manufacturing resistors for telephone and telegraph apparatus are classified in Industry 3661.

Resistors, for electronic end products
Thermistors, except temperature sensors

Varistors

3677 Electronic Coils, Transformers and Other Inductors

Establishments primarily engaged in manufacturing electronic coils, transformers, and inductors. Establishments primarily engaged in manufacturing transformers and inductors for telephone and telegraph apparatus are classified in Industry 3661; electric lamps in Industry 3641; and semiconductor (solid state) and related devices in Industry 3674.

Baluns
Coil windings, electronic
Coils, chokes and other electronic inductors

Filters, electronic
Inductors, electronic
Transformers, electronic types

3678 Connectors, for Electronic Applications

Establishments primarily engaged in manufacturing electronic connectors. Establishments primarily engaged in manufacturing electronic capacitors are classified in Industry 3675; and electronic coils, transformers and other inductors in Industry 3677.

Connectors, for electronic applications

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.
367

ELECTRONIC COMPONENTS AND ACCESSORIES—Continued**3679 Electronic Components, Not Elsewhere Classified**

Establishments primarily engaged in manufacturing electronic components, not elsewhere classified, such as receiving antennas, printed circuits, switches, and wave-guides.

Antennas, receiving: automobile, home, portable
Attenuators
Circuit boards, television and radar: electric—printed
Commutators, electronic
Constant impedance transformers
Cores, magnetic
Cryogenic cooling devices (cryostats, etc.) for infra-red detectors, masers
Crystals and crystal assemblies, radio
Delay lines
Electronic circuits, except semiconductor or solid state
Electronic tube parts, except glass blanks
Ferrite electronic parts
Harness assemblies, for electronic use: wire and cable
Headphones, radio
Hermetic seals, for electronic equipment
Impedance conversion units, high frequency
Loads, electronic
Magnetic recording tape
Microwave components
Oscillators, except laboratory type
Parametric amplifiers
Passive repeaters
Phonograph needle cartridges
Phonograph needles
Piezoelectric crystals

Power supplies, static: regulated, unregulated, variable frequency
Printed circuits
Pulse forming networks
Quartz crystals, for electronic application
Recording and playback heads, magnetic
Recording heads, for speech and musical equipment
Rectifiers, electronic: except solid state
Relays, for electronic use
Resonant reed devices, electronic
Rheostats, for electronic end products
Sockets, electronic tube
Solenoids for electronic applications
Step positioners for transmitting equipment
Styl, phonograph record cutting
Switches, electronic applications
Switches, stepping
Tape, magnetic recording, including paper tape
Thick film circuits
Transducers, electrical
Tube retainers, electronic
Tube spacers, mica
Tube transformer assemblies used in firing electronic tubes
Video triggers, except remote control TV devices
Voice controls
Wave guides and fittings

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MISCELLANEOUS ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES**3691 Storage Batteries**

Establishments primarily engaged in manufacturing storage batteries.

Alkaline cell storage batteries
Lead acid batteries (storage batteries)

Storage batteries

3692 Primary Batteries, Dry and Wet

Establishments primarily engaged in manufacturing primary batteries, dry or wet.

Batteries, primary: dry or wet

Dry cell batteries, single and multiple cell

3693 Radiographic X-ray, Fluoroscopic X-ray, Therapeutic X-ray, and Other X-ray Apparatus and Tubes; Electromedical and Electrotherapeutic Apparatus

Establishments primarily engaged in manufacturing radiographic X-ray, fluoroscopic X-ray, and therapeutic X-ray apparatus and tubes for medical, industrial, research and control applications. This industry also includes establishments primarily engaged in manufacturing electromedical and electrotherapeutic apparatus except electrotherapeutic lamp units for ultra-violet and infra-red radiation (Industry 3641). Establishments primarily engaged in manufacturing radio receiving type tubes are classified in Industry 3671; television receiving cathode ray tubes in Industry 3672; and transmitting tubes in Industry 3673.

Arc lamp units, electrotherapeutic: except infra-red and ultra-violet
Cardiographs
Electrocardiographs
Electroencephalographs
Electromedical apparatus
Electromyographs
Fluoroscopes
Fluoroscopic X-ray apparatus and tubes
Lamps, X-ray

Phonocardiographs
Radiographic X-ray apparatus and tubes: medical, industrial, and research
Radium equipment
Therapeutic X-ray apparatus and tubes: for medical, industrial, research
X-ray apparatus and tubes: for medical, industrial, research, and control
X-ray generators

MANUFACTURING

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Group Industry
No. No.**369 MISCELLANEOUS ELECTRICAL MACHINERY, EQUIPMENT, AND SUPPLIES—
Continued****3694 Electrical Equipment for Internal Combustion Engines**

Establishments primarily engaged in manufacturing electrical equipment for internal combustion engines. Important products of this industry include armatures, starting motors, alternators, and generators for automobiles and aircraft; and ignition apparatus for internal combustion engines, including spark plugs, magnetos, coils, and distributors.

Alternators, automotive
Armatures, automobile
Automotive electrical equipment
Battery cable wiring sets for internal combustion engines
Battery charging generators, automobile and aircraft
Coils, ignition: automotive
Generators, aircraft and automotive
Harness, wiring for motor vehicles: ignition

Ignition cable sets or wire assemblies for internal combustion engines
Ignition systems, high frequency
Motor generator sets, automotive
Motors, starting: automotive and aircraft
Spark plugs, for internal combustion engines
Voltage regulators, automotive

3699 Electrical Machinery, Equipment, and Supplies, Not Elsewhere Classified

Establishments primarily engaged in manufacturing electrical machinery, equipment, and supplies, not elsewhere classified, such as appliance and extension cords, bells and chimes, and insect traps.

Appliance cords for electric irons, grills, waffle irons, etc—m/psw
Bells, electric
Chimes, electric
Christmas tree lighting sets, electric
Clothing, electrically heated
Door opening and closing devices, except photoelectric cell operated
Electric fence chargers
Electric lamp (bulb) parts
Electrodes, cold cathode fluorescent lamp
Extension cords, made from purchased insulated wire

Filaments, for electric lamps
Fly traps, electrical
Gongs, electric
Grids, electric
Lamp (bulb) parts, electric
Lamps, insect: electric
Lead-in wires, electric lamp: made from purchased wire
Logs, fireplace: electric
Ornaments, Christmas tree: electric
Supports and filaments, for electric lamps
Trouble lights, made from purchased materials

Major Group 37.—TRANSPORTATION EQUIPMENT*The Major Group as a Whole*

This major group includes establishments engaged in manufacturing equipment for transportation of passengers and cargo by land, air, and water. Important products produced by establishments classified in this major group include motor vehicles, aircraft, guided missiles and space vehicles, ships, boats, railroad equipment, and miscellaneous transportation equipment such as motorcycles, bicycles, and snowmobiles. Establishments primarily engaged in manufacturing mobile homes are classified in Industry 2451.

Group Industry
No. No.

371

MOTOR VEHICLES AND MOTOR VEHICLE EQUIPMENT**3711 Motor Vehicles and Passenger Car Bodies**

Establishments primarily engaged in manufacturing or assembling complete passenger automobiles, trucks, commercial cars and buses (except trackless trolleys—Industry 3743), and special purpose motor vehicles. This industry also includes establishments primarily engaged in manufacturing chassis or passenger car bodies. Such establishments may also manufacture motor vehicle parts, but establishments primarily engaged in manufacturing motor vehicle parts except chassis and passenger bodies are classified in Industry 3714. Establishments primarily engaged in manufacturing truck and bus bodies and assembling them on purchased chassis are classified in Industry 3718; motorcycles in Industry 3751; wheel tractors, except contractors' off-highway types, in Industry 3523; tracklaying and contractors' off-highway tractors in Industry 3581; combat tanks in Industry 3795; and stamped body parts for passenger cars in Industry 3465.

Ambulances (motor vehicles)
Amphibian motor vehicles
Assembling complete automobiles,
trucks, commercial cars, and buses
Automobiles
Bodies, passenger automobile
Brooms, powered (motor vehicles)
Cars, armored
Chassis, motor vehicle
Fire department vehicles (motor vehicles)
Flushers, street (motor vehicles)
Hearse (motor vehicles)
Mobile lounges (motor vehicle)
Motor buses, except trackless trolley

Motor trucks, except off-highway
Motor vehicles, including amphibian
Patrol wagons (motor vehicles)
Personnel carriers (motor vehicles)
Reconnaissance cars
Road oilers (motor vehicles)
Scout cars (motor vehicles)
Snowplows (motor vehicles)
Station wagons (motor vehicles)
Street sprinklers and sweepers (motor vehicles)
Taxicabs
Tractors, truck: for highway use
Universal carriers, military

3713 Truck and Bus Bodies

Establishments primarily engaged in manufacturing truck and bus bodies, for sale separately or for assembly on purchased chassis. Establishments primarily engaged in manufacturing complete trucks and buses are classified in Industry 3711, stamped body parts for trucks and buses in Industry 3465; and truck trailers and demountable cargo containers in Industry 3715.

Ambulance bodies
Automobile wrecker-truck body
Bodies, dump
Bus bodies (motor vehicles)
Cabs, for agricultural tractors
Cabs, for industrial trucks

Hearse bodies
Truck beds
Truck bodies, motor vehicle
Truck cabs, for motor vehicles
Truck tops

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Group Industry
No. No.
371

MOTOR VEHICLES AND MOTOR VEHICLE EQUIPMENT—Continued**3714 Motor Vehicle Parts and Accessories**

Establishments primarily engaged in manufacturing motor vehicle parts and accessories, but not engaged in manufacturing complete motor vehicles or passenger car bodies. Establishments primarily engaged in manufacturing or assembling complete automobiles and trucks are classified in Industry 3711, tires and tubes in Industry 3011, automobile glass in Major Group 32, automobile stampings in Industry 3465, vehicular lighting equipment in Industry 3647, ignition systems in Industry 3694, storage batteries in Industry 3691, and carburetors, pistons, rings, and valves in Industry 3592.

Acceleration equipment, motor vehicle
Air brakes, motor vehicle
Automotive wiring harness sets, other than ignition
Axle housings and shafts, motor vehicle
Axles, motor vehicle
Bearings, motor vehicle: except ball and roller
Brake drums
Brakes and brake parts, motor vehicle
Bumpers and bumperettes, motor vehicle
Camshafts, motor vehicle
Choker rods, motor vehicle
Cleaners, air: motor vehicle
Connecting rods, motor vehicle engine
Control equipment, motor vehicle: acceleration mechanisms, governors, etc.
Crankshaft assemblies, motor vehicle
Cylinder heads, motor vehicle
Defrosters, motor vehicle
Differentials and parts, motor vehicle
Directional signals, motor vehicle
Drive shafts, motor vehicle
Engines and parts, except diesel: motor vehicle
Exhaust systems and parts, motor vehicle
Fifth wheels
Filters: oil, fuel, and air—motor vehicle
Frames, motor vehicle
Fuel pumps, motor vehicle
Fuel systems and parts, motor vehicle: gas tanks, fuel pipes, and manifold
Gas tanks, motor vehicle
Gears, motor vehicle
Governors, motor vehicle
Heaters, motor vehicle
Hoods, motor vehicle
Horns, motor vehicle

Hydraulic fluid power pumps, for automotive steering mechanisms
Instrument board assemblies, motor vehicle
Lubrication systems and parts, motor vehicle
Manifolds, motor vehicle
Motor vehicle engine rebuilding, on a factory basis
Motor vehicle parts and accessories (except motor vehicle stampings)
Mufflers, exhaust: motor vehicle
Oil strainers, motor vehicle
Pipes, fuel: motor vehicle
Power transmission equipment, motor vehicle
Radiators and radiator shells and cores, motor vehicle
Rear axle housings, motor vehicle
Rebuilding motor vehicle engines and transmissions, on a factory basis
Rims, wheel: motor vehicle
Sanders, motor vehicle safety
Shock absorbers, motor vehicle
Steering mechanisms, motor vehicle
Third axle attachments or six-wheel units for motor vehicles
Tie rods, motor vehicle
Tire valve cores
Tops, motor vehicle: except stamped metal
Transmission housings and parts, motor vehicle
Transmissions, motor vehicle
Universal joints, motor vehicle
Vacuum brakes, motor vehicle
Wheels, motor vehicle
Windshield frames, motor vehicle
Windshield wiper systems, all types
Winterfronts, motor vehicle
Wiring harness sets (other than ignition), automotive

3715 Truck Trailers

Establishments primarily engaged in manufacturing truck trailers, truck trailer chassis for sale separately, detachable trailer bodies (cargo containers) for sale separately, and detachable trailer (cargo container) chassis, for sale separately.

Bus trailers, tractor type
Demountable cargo containers
Motor truck trailers
Semitrailers for missile transportation
Semitrailers for truck tractors

Trailers or vans for transporting horses
Trailers, motor truck
Truck trailers

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AIRCRAFT AND PARTS**3721 Aircraft**

Establishments primarily engaged in manufacturing or assembling complete aircraft. This industry also includes establishments primarily engaged in research and development on aircraft or in factory-type aircraft modification on a contract or fee basis. Establishments primarily engaged in manufacturing engines, propellers, and other aircraft parts and auxiliary equipment are classified in Industries 3724 and 3728;

STANDARD INDUSTRIAL CLASSIFICATION

Group No.	Industry No.
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372 AIRCRAFT AND PARTS—Continued

3721 Aircraft—Continued

and those producing guided missiles and space vehicles and parts are classified in Group 876.

Aircraft
Airplanes, fixed or rotary wing
Airships
Autogiros

Balloons (aircraft)
Dirigibles
Glinters (aircraft)
Helicopters

3724 Aircraft Engines and Engine Parts

Establishments primarily engaged in manufacturing aircraft engines and engine parts. Research and development on aircraft engines is included in this industry. Establishments primarily engaged in manufacturing guided missile and space vehicle propulsion units and parts are classified in Industry 8704.

Air scoops, aircraft
Aircraft engine starting vibrators
Aircraft engines and engine parts, internal combustion and jet propulsion
Cooling systems, aircraft engine
Engine heaters, aircraft
Engine mount parts, aircraft
Exhaust systems, aircraft
External power units, for hand inertia starters, aircraft

Jet assisted takeoff devices (JATO)
Lubricating systems, aircraft
Pumps, aircraft engine
Rocket motors, aircraft
Starters, aircraft: nonelectric
Turbines, aircraft type
Turbo-superchargers, aircraft

3728 Aircraft Parts and Auxiliary Equipment, Not Elsewhere Classified

Establishments primarily engaged in manufacturing aircraft parts and auxiliary equipment, not elsewhere classified. Research and development on aircraft parts is included in this industry. Establishments primarily engaged in manufacturing or assembling complete aircraft are classified in Industry 3721, aircraft engines and parts in Industry 3724, aeronautical instruments in Industry 3811, aeronautical electrical equipment in Industry 3694, and guided missile and space vehicle parts and auxiliary equipment in Industry 3769.

- Accumulators, aircraft propeller
- Actuators, aircraft: mechanical, electrical, and hydraulic
- Adapter assemblies, hydromatic propeller
- Ailerons, aircraft
- Aircraft armament, except guns
- Aircraft arresting device system
- Aircraft assemblies, subassemblies, and parts, except engines
- Aircraft body assemblies and parts
- Aircraft power transmission equipment
- Aircraft propeller parts
- Airframe assemblies, except for guided missiles
- Airplane brake expanders
- Alighting assemblies (landing gear), aircraft
- Beaching gear, aircraft
- Blades, aircraft propeller: metal or wood
- Bomb racks, aircraft
- Brakes, aircraft
- Chaffing dispensers, aircraft
- Controls: hydraulic and pneumatic, aircraft
- Countermeasure dispensers, aircraft
- De-icing equipment, aircraft
- Dive brakes, aircraft
- Dusting and spraying equipment, aircraft
- Dynetric balancing stands, aircraft
- Elevators, aircraft
- Empennage (tail) assemblies and parts, aircraft
- Fins, aircraft
- Flaps, aircraft wing
- Fluid power and control components, aircraft
- Fuel tanks, aircraft: including self-sealing
- Fuselage assemblies, aircraft

Gears, power transmission : aircraft
Governors, aircraft propeller feather-
ing
Hubs, aircraft propeller
Hydraulic pumps, valves, and cylin-
ders : aircraft
Instrument panel mockups : aircraft
training units
Landing gear, aircraft
Landing aids and tracks, aircraft
Link trainers (aircraft training mech-
anisms)
Nacelles, aircraft
Oleo struts, aircraft
Oxygen systems, for aircraft
Panel assemblies (hydromatic propeller
test stands), aircraft
Pontoons, aircraft
Power transmission equipment, aircraft
Propeller aligning tables
Propellers, variable and fixed pitch :
and parts—aircraft
Pumps, propeller feathering
Refueling equipment, airplane : for use
in flight
Rotor-blades for helicopters
Rudders, aircraft
Seat ejector devices, aircraft
Spinners, aircraft propeller
Stabilizers, aircraft
Tanks, fuel : aircraft
Target drones
Targets, trailer type : aircraft
Tow targets
Training aids, aircraft : except elec-
tronic
Transmissions, aircraft
Turret test fixtures, aircraft
Turrets and turret drives, aircraft
Wheels, aircraft
Wing assemblies and parts, aircraft

MANUFACTURING

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Group Industry
No. No.**373 SHIP AND BOAT BUILDING AND REPAIRING****3731 Ship Building and Repairing**

Establishments primarily engaged in building and repairing all types of ships, barges, and lighters, whether propelled by sail or motor power or towed by other craft. This industry also includes the conversion and alteration of ships. Establishments primarily engaged in fabricating structural assemblies or components for ships, or subcontractors engaged in ship painting, joinery, carpentry work, electrical wiring installation, etc., are classified in other industries.

Barges, building and repairing
Cargo vessels, building and repairing
Combat ships, building and repairing
Dredges, building and repairing
Drilling platforms, floating
Drydocks, floating
Ferryboats, building and repairing
Fireboats, building and repairing
Fishing vessels, large: seiners and
trawlers—building and repairing
Hydrofoil vessels
Landing ships, building and repairing
Lighters, marine: building and repair-
ing
Lighthouse tenders, building and re-
pairing
Marine rigging
Naval ships, building and repairing

Passenger-cargo vessels, building and
repairing
Radar towers, floating
Sailing vessels, commercial: building
and repairing
Scows, building and repairing
Ship building and repairing
Submarine tenders, building and repair-
ing
Tankers (large craft), building and re-
pairing
Tenders: large craft building and re-
pairing
Towboats, building and repairing
Transport vessels, passenger and
troop: building and repairing
Tugboats, building and repairing
Yachts, building and repairing

3732 Boat Building and Repairing

Establishments primarily engaged in building and repairing all types of boats. Establishments primarily engaged in cleaning and storing boats and in the rental of dock space, and yacht clubs are classified in nonmanufacturing industries. Establishments primarily engaged in manufacturing rubber and nonrigid plastic boats are classified in Major Group 80.

Boat kits, wooden (not a model)
Boats, fiber glass: building and repair-
ing
Boats: motorboats, sailboats, row-
boats, and canoes—building and re-
pairing
Boats, rigid: plastic
Canoes, building and repairing
Dinghies, building and repairing
Dories, building and repairing
Fishing boats, small: such as lobster
boats, crab boats, and oyster boats
Houseboats, building and repairing

Hydrofoil boats
Kayaks, building and repairing
Life rafts, except inflatable (rubber and
plastic)
Lifeboats, building and repairing
Motorboats, inboard and outboard:
building and repairing
Pontoons, except aircraft and inflatable
(rubber and plastic)
Skiffs, building and repairing
Tenders (small motor craft), building
and repairing

374 RAILROAD EQUIPMENT**3743 Railroad Equipment**

Establishments primarily engaged in building and rebuilding locomotives (including frames and parts, not elsewhere classified) of any type or gage; and railroad, street, and rapid transit cars and car equipment for operation on rails for freight and passenger service. This industry also includes establishments primarily engaged in manufacturing trackless trolley buses. Establishments primarily engaged in manufacturing mining cars are classified in Industry 3532. Repair shops, owned and operated by railroads or local transit companies, rebuilding or repairing locomotives or cars, or building new locomotives or cars for their own account, are classified in Major Groups 40 and 41.

Brakes, railway: air and vacuum
Cars and car equipment, freight or pas-
senger
Dining cars and car equipment
Engines, steam (locomotives)
Freight cars and car equipment
Heating units, for railroad cars
Industrial locomotives and parts, elec-
tric or nonelectric
Interurban cars and car equipment

Locomotives, locomotive frames and
parts
Lubrication systems, locomotive
Mining locomotives and parts, electric
or nonelectric
Railway maintenance cars
Railway motor cars
Rapid transit cars and equipment
Sleeping cars, railroad
Street cars and car equipment

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STANDARD INDUSTRIAL CLASSIFICATION

Group No.	Industry No.	
374		RAILROAD EQUIPMENT—Continued
3743		Railroad Equipment—Continued
		Switching locomotives and parts, electric and nonelectric
		Tank freight cars and car equipment
		Tenders, locomotive
		Trolley bus poles
		Trolley buses, trackless
		Trolley retrievers
		Trolley shoes
375		MOTORCYCLES, BICYCLES, AND PARTS
3751		Motorcycles, Bicycles, and Parts
		Establishments primarily engaged in manufacturing motorcycles, bicycles, and similar equipment and parts. Establishments primarily engaged in assembling motorcycles or bicycles from purchased parts are also included in this industry. Establishments primarily engaged in manufacturing children's vehicles except bicycles are classified in Industry 3944. Establishments primarily engaged in manufacturing golf carts and other similar personnel carriers are classified in Industry 3799.
		Bicycles and parts
		Brakes, bicycle: friction clutch and other
		Frames, motorcycle and bicycle
		Gears, motorcycle and bicycle
		Handle bars, motorcycle and bicycle
		Motor scooters and parts
		Motorbikes and parts
		Motorcycles and parts
		Saddles, motorcycle and bicycle
		Seat posts, motorcycle and bicycle
376		GUIDED MISSILES AND SPACE VEHICLES AND PARTS
3761		Guided Missiles and Space Vehicles
		Establishments primarily engaged in manufacturing complete guided missiles and space vehicles. Research and development and other services on or for guided missiles and space vehicles are included in this industry. Establishments primarily engaged in manufacturing guided missile and space vehicle propulsion units and propulsion unit parts are classified in Industry 3764; space satellite, and guided missile and space vehicle airborne and ground guidance, checkout and launch electronic systems and components in Industry 3862; and guided missile and space vehicle airframes, nose cones, and space capsules in Industry 3769.
		Ballistic missiles, complete
		Guided missiles, complete
		Research and development of guided missiles and space vehicles
		Rockets (guided missiles), space and military: complete
		Space vehicles, complete
3764		Guided Missile and Space Vehicle Propulsion Units and Propulsion Unit Parts
		Establishments primarily engaged in manufacturing guided missile propulsion units and propulsion unit parts. Research and development on guided missile and space vehicle propulsion units and propulsion unit parts is also included in this industry.
		Engines and engine parts, guided missile
		Research and development of guided missile and space vehicle engines
		Propulsion units for guided missiles and space vehicles
		Rocket motors, guided missile
3769		Guided Missile and Space Vehicle Parts and Auxiliary Equipment, Not Elsewhere Classified
		Establishments primarily engaged in manufacturing guided missile and space vehicle parts and auxiliary equipment, not elsewhere classified. Research and development on guided missile and space vehicle parts and auxiliary equipment, not elsewhere classified, is also included in this industry. Establishments primarily engaged in manufacturing navigational and guidance systems are classified in Industry 3862.
		Airframe assemblies, for guided missiles
		Bellows assemblies for missiles, metal
		Castings for missiles and missile components, shipping and storage
		Nose cones, guided missile
		Research and development of guided missile and space vehicle components
		Space capsules

MANUFACTURING

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Group Industry
No. No.**379 MISCELLANEOUS TRANSPORTATION EQUIPMENT****3792 Travel Trailers and Campers**

Establishments primarily engaged in manufacturing travel trailers for attachment to passenger cars or other vehicles, pickup coaches (campers) or caps (covers) for mounting on pickup trucks and self-contained motor homes. Travel trailers are generally 35 feet long or less, 8 feet wide or less, and have storage facilities for water and waste. Establishments primarily engaged in manufacturing mobile homes are classified in Industry 2451.

Campers, for mounting on trucks
Automobile house trailer chassis
Camping trailers and chassis
Chassis for camping trailers
House trailers except as permanent dwellings
Motor homes, self-contained
Pickup coaches (campers), for mounting on pickup trucks

Pickup covers, canopies or caps
Tent-type camping trailers
Trailer coaches, automobile
Trailers, house: except as permanent dwellings
Truck campers (slide-in campers)

3795 Tanks and Tank Components

Establishments primarily engaged in manufacturing or assembling complete tanks, and specialized components for tanks. Establishments primarily engaged in manufacturing military vehicles other than tanks are classified in Group 871, and tank engines in Industry 3519.

Amphibian tanks, military
Tank components, specialized: military

Tank recovery vehicles
Tanks, military: including factory rebuilding

3799 Transportation Equipment, Not Elsewhere Classified

Establishments primarily engaged in manufacturing transportation equipment, not elsewhere classified. Establishments primarily engaged in manufacturing industrial trucks, tractors, trailers, and stackers are classified in Industry 3537, and children's vehicles except bicycles in Industry 3944.

All terrain vehicles (ATV)
Automobile trailer chassis, except house trailer
Autos, midjet: power driven
Caddy cars
Chassis, automobile trailer: except house trailer

Electrocars, for transporting golfers
Gocarts, except children's
Pushcarts
Snowmobiles
Trailers, except house and recreational: for automobiles
Wheelbarrows

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STANDARD INDUSTRIAL CLASSIFICATION

Major Group 38.—MEASURING, ANALYZING, AND CONTROLLING INSTRUMENTS; PHOTOGRAPHIC, MEDICAL, AND OPTICAL GOODS; WATCHES AND CLOCKS*The Major Group as a Whole*

This major group includes establishments engaged in manufacturing instruments (including professional and scientific) for measuring, testing, analysing, and controlling, and their associated ~~accessories~~ and accessories; optical instruments and lenses; surveying and drafting instruments; surgical, ~~medical~~, and dental instruments, equipment, and supplies; ophthalmic goods; photographic equipment and supplies; and watches and clocks.

Group Industry
No. No.

381 ENGINEERING, LABORATORY, SCIENTIFIC, AND RESEARCH INSTRUMENTS AND ASSOCIATED EQUIPMENT**3811 Engineering, Laboratory, Scientific, and Research Instruments and Associated Equipment**

Establishments primarily engaged in manufacturing engineering, laboratory, and scientific instruments, including nautical, navigational, aeronautical, surveying, and drafting equipment and instruments for laboratory work and scientific research (except optical instruments—Industry 3832). Establishments primarily engaged in manufacturing surgical and medical instruments are classified in Industry 3841; dental instruments and equipment in Industry 3843; measuring, analyzing, and controlling instruments, including instruments for measuring electrical quantities and characteristics, in Group 382; watches and clocks in Industry 3873; machinists' precision measuring tools in Industry 3545; and measuring and dispensing pumps in Industry 3586.

Acceleration indicators and systems components, aerospace type
Airspeed instrumentation (aeronautical instruments)
Aircraft flight instruments
Alidades (surveying instruments)
Altimeters, standard and sensitive (aeronautical instruments)
Angle-of-attack instrumentation
Angle-of-yaw instrumentation
Autoclaves, laboratory
Automatic pilots, aircraft
Bacteriological laboratory instruments: except medical, optical, and dental
Balances, laboratory
Bank and turn indicators and components (aeronautical instruments)
Binnacles (compass housings)
Blood testing apparatus
Bunsen burners
Calibration tapes, for physical testing machines
Calorimeters
Centrifuges, laboratory
Chemical laboratory apparatus
Clinical laboratory instruments, except medical and dental
Coal testing apparatus
Compasses and accessories, except portable (navigational instruments)
Degaussing equipment
Distilling apparatus, laboratory type
Drafting instruments and machines: T-squares, templates, etc.

Driftmeters, aeronautical
Dust sampling and analysis equipment
Environmental testing equipment
Fathometers
Furnaces, laboratory: except dental
Gas analyzing equipment
Generators, magnetic idealisation
Glide slope indicators
Gyro gimbals
Gyrocompasses
Gyropilots
Gyroscopes
Haemoglobinometers
Horizon flight indicators
Hydrogen ion equipment, colorimetric
Incubators, laboratory
Integrators (mathematical instruments)
Laboratory equipment: fume hoods, distillation racks, benches, cabinets
Laboratory testing and scientific instruments, except electric
Laser beam alignment devices
Laser scientific and engineering instruments
Machmeters
Magnetic idealisation generators
Map plotting instruments
Micromanipulator
Microtomes
Meteorological instruments: laboratory, except optical
Nautical instruments
Navigational instruments
Omni-bearing indicators

MANUFACTURING

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Group Industry
No. No.
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**ENGINEERING, LABORATORY, SCIENTIFIC, AND RESEARCH INSTRUMENTS
AND ASSOCIATED EQUIPMENT—Continued**

**3811 Engineering, Laboratory, Scientific, and Research Instruments and Associated
Equipment—Continued**

Pellicle mirrors
Petroleum product analyzing apparatus
Photogrammetry equipment
Photopitometers
Physics laboratory apparatus and instruments
Pi tapes (metal periphery direct reading diameter tapes)
Pictorial deviation indicators
Pipettes, hemocytometer
Pitometers
Planimeters
Plotting instruments, drafting and map reading
Plumb bobs
Position indicators for landing gear, cowl flaps, stabilizers, etc.
Pumps, vacuum: laboratory
Radio magnetic instrumentation (RMI)
Rate-of-climb instrumentation

Seismographs
Selsmometers
Selsmoscopes
Sewage testing apparatus
Sextants
Shadowgraphs
Slide rules
Standards and calibrating equipment, laboratory
Surveying instruments and accessories
Tables, work: laboratory
Taffrail logs
Theodolites (surveying equipment)
Time interval measuring equipment, electric (laboratory type)
Time measuring and counting equipment, electric (laboratory type)
Transits, surveyors'
Turntable indicator testers
Water testing apparatus
Work tables, laboratory

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MEASURING AND CONTROLLING INSTRUMENTS

3822 Automatic Controls for Regulating Residential and Commercial Environments and Appliances

Establishments primarily engaged in manufacturing temperature and related controls for heating and air-conditioning installations and refrigeration applications, which are electrically, electronically, or pneumatically actuated, and which measure and control variables such as temperature and humidity; and automatic regulators used as components of household appliances. Establishments primarily engaged in manufacturing industrial process controls are classified in Industry 3823; motor control switches in Industry 3822, switches for household appliances in Industry 3843, and appliance timers in Industry 3873.

Air flow controllers, air conditioning and refrigeration: except valves
Appliance regulators, except switches
Building services monitoring controls, automatic
Clothes drier controls, including dryness controls
Combination limit and fan controls
Combination oil and hydronic controls
Damper operators: pneumatic, thermostatic, electric
Electric air cleaner controls, automatic
Electric heat proportioning controls, modulating controls
Electric space heater controls, automatic
Energy cutoff controls, residential and commercial types
Fan control, temperature responsive
Flame safety controls for furnaces and boilers
Float controls, residential and commercial types
Gas burner automatic controls, except valves
Gradual switches, pneumatic
Humidistats: wall, duct, and skeleton
Humidity controls, air conditioning types
Hydronic circulator control, automatic
Hydronic limit control
Hydronic pressure and temperature controls
Ice bank controls
Icemaker controls
Ignition controls for gas appliances and furnaces, automatic

In-built thermostats, filled system, and bimetal types
Incinerator control systems, residential and commercial types
Limit controls, residential and commercial heating types
Line or limit control for electric heat
Liquid level controls, residential and commercial heating types
Oven temperature controls, nonindustrial
Pneumatic relays, air-conditioning type
Pressure controllers, air-conditioning system type
Primary oil burner controls, including stack controls and cadmium cells
Refrigeration/air-conditioning defrost controls
Refrigeration controls (pressure)
Refrigeration thermostats
Sequencing controls for electric heat
Static pressure regulators
Steam pressure controls, residential and commercial type
Surface burner controls, temperature
Switches, pneumatic positioning remote
Switches, thermostatic
Temperature controls, automatic: residential and commercial types
Temperature sensors for motor windings
Thermocouples, vacuum: glass
Thermostats
Time program controls, air conditioning systems
Vapor heating controls
Water heater controls

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MEASURING AND CONTROLLING INSTRUMENTS—Continued**3823 Industrial Instruments for Measurement, Display, and Control of Process Variables; and Related Products**

Establishments primarily engaged in manufacturing industrial instruments and related products for measuring, displaying (indicating and/or recording), transmitting, and controlling process variables in manufacturing, energy conversion, and public service utilities. These instruments operate mechanically, pneumatically, electronically, or electrically to measure process variables such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, alkalinity, specific gravity, gas and liquid concentration, sequence, time interval, mechanical motion, and rotation. Establishments primarily engaged in manufacturing electrical integrating meters are classified in Industry 3825; residential and commercial comfort controls in Industry 3822; all liquid-in-glass and bimetal thermometers and glass hydrometers in Industry 3829; recorder charts in Group 276, and optical instruments in Industry 3832.

Absorption analyzers, industrial process type: infra-red, X-ray, etc.
Analyzers, industrial process type
Annunciators, relay and solid state types: industrial display
Boiler controls: industrial, power, and marine type
Buoyancy instruments, industrial process type
Chromatographs, industrial process type
Combustion control instruments, except commercial and household furnace type
Computer interface equipment for industrial process control
Controllers for process variables: electric, electronic, and pneumatic
Coulometric analyzers, industrial process type
Data loggers, industrial process type
Density and specific gravity instruments, industrial process type
Differential pressure instruments, industrial process type
Digital displays of process variables
Draft gauges, industrial process type
Electrodes used in industrial process measurement
Electrolytic conductivity instruments, industrial process type
Flow instruments, industrial process type
Fluidic devices, circuits, and systems for process control
Gas and liquid analysis instruments, industrial process type
Gas flow computers, industrial process type
Humidity instruments, industrial process type
Hydrometers, industrial process type
Hygrometers, industrial process type
Industrial process control instruments
Infra-red instruments, industrial process type
Level and bulk measuring instruments, industrial process type
Liquid analysis instruments, industrial process type

Liquid concentration instruments, industrial process type
Liquid level instruments, industrial process type
Magnetic flow meters, industrial process type
Manometers, industrial process type
Moisture meters, industrial process type
Nuclear reactor controls
Panelboard indicators, recorders and controllers: receiver type
PH instruments, industrial process type
Potentiometric self-balancing instruments, except X-Y plotters
Pressure gauges, dial and digital
Pressure instruments, industrial process type
Primary elements for process flow measurement: orifice plates, etc.
Programmable, process type
Pyrometers, industrial process type
Refractometers, industrial process type
Resistance thermometers and bulbs, industrial process type
Telemetering instruments, industrial process type
Temperature instruments: industrial process type, except glass and bimetal
Thermal conductivity instruments, industrial process type
Thermistors, industrial process type
Thermocouples, industrial process type
Thermometers, filled system: industrial process type
Time cycle and program controllers, industrial process type
Transmitters of process variables, standard signal conversion
Turbidity instruments, industrial process type
Turbine flow meters, industrial process type
Viscosimeters, industrial process type
Water quality monitoring and control systems

3824 Totalizing Fluid Meters and Counting Devices

Establishments primarily engaged in manufacturing totalizing (registering) meters monitoring fluid flows, such as watermeters and gasmeters; and producers of mechanical and electromechanical counters and associated metering devices. Establishments primarily engaged in manufacturing electricity integrating meters and electronic fre-

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Group Industry
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MEASURING AND CONTROLLING INSTRUMENTS—Continued**3824 Totalizing Fluid Meters and Counting Devices—Continued**

quency counters are classified in Industry 3825; and industrial process instruments in Industry 3823.

Controls, revolution and timing instruments
Counter type registers
Counters: mechanical, electrical, electronic totalizing
Counters, revolution
Electromechanical counters
Electronic totalizing counters
Gasometers; domestic, large capacity, industrial
Gasoline dispensing meters (except pumps)
Gauges for computing pressure-temperature corrections
Impeller and counter driven flow meters
Integrating meters, nonelectric
Linear counters
Magnetic counters
Measuring wheels
Meters: gas, liquid, tallying, and mechanical measuring—except electrical
Odometers

Parking meters
Pedometers
Positive displacement meters
Predetermining counters
Production counters
Propeller type meters with registers
Registers, linear tallying
Rotary type meters, consumption registering
Speed indicators and recorders, vehicle
Speedometers
Tachometer, centrifugal
Tally counters
Tallying meters: except electrical instruments, watches, clocks
Tank truck meters
Taximeters
Totalizing meters, consumption registering, except aircraft
Turbine meters, consumption registering
Vehicle tank meters
Watermeters, consumption registering

3825 Instruments for Measuring and Testing of Electricity and Electrical Signals

Establishments primarily engaged in manufacturing instruments for measuring the characteristics of electricity and electrical signals, such as voltmeters, ammeters, wattmeters, watt-hour meters, demand meters, and equipment for testing the electrical characteristics of electrical, radio, and communication circuits and of internal combustion engines. Establishments primarily engaged in the manufacturing of electronic checkout, monitoring, evaluating, and other electronic support equipment for electronic navigational, radar, sonar, and other communications systems are classified in Industry 3862.

Alternator and generator testers
Ammeters
Ampere-hour meters
Analog-to-digital converters, electronic instrumentation type
Analyzers for testing electrical characteristics
Audiometers
Automotive ammeters and voltmeters
Battery testers, electrical
Bleed control cabinets (engine testers)
Bridges: Kelvin, Wheatstone, vacuum tube, megohm, etc.
Current measuring equipment
Decade boxes: capacitance, inductance, and resistance
Demand meters, electric
Diode and transistor testers
Digital panel meters, electricity measuring
Digital test equipment, electronic and electrical circuits and equipment
Digital-to-analog converters, electronic instrumentation type
Distortion meters and analyzers
Elapsed time meters, electronic
Electrical power measuring equipment
Electron tube test equipment
Electronic test equipment for testing electrical characteristics
Energy measuring equipment, electrical
Field strength and intensity measuring equipment, electrical
Frequency meters: electrical, mechanical, and electronic
Frequency synthesizers
Function generators
Galvanometers
Ignition testing instruments
Impedance measuring equipment

Indicating instruments, electric
Instrument relays, all types
Instrument shunts
Instruments, electric: for testing electrical characteristics
Instruments for measuring electrical quantities
Integrated-circuit testers
Integrating electricity meters
Internal combustion engine analyzers, to test electrical characteristics
Laboratory standards, electric: resistance, inductance, and capacitance
Logic circuit testers
Measuring equipment for electronic and electrical circuits and equipment
Measuring instruments and meters, electric
Meters, electric: pocket, portable, panelboard, and graphic recording
Meters, power factor and phase angle
Microwave test equipment
Multimeters
Network analyzers
Ohmmeters
Oscillators, audiofrequency and radio-frequency (instrument types)
Oscillographs and oscilloscopes
Potentiometric instruments; except industrial process type
Power measuring equipment, electrical
Pulse (signal) generators
Radar testing instruments, electric
Radio apparatus analyzers, for testing electrical characteristics
Radio frequency measuring equipment
Radio set analyzers, electrical
Radio tube checkers, electrical
Recorders, oscillographic
Reflectometers, sliding shorts

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MEASURING AND CONTROLLING INSTRUMENTS—Continued

3825 Instruments for Measuring and Testing of Electricity and Electrical Signals—Con.

Resistance measuring equipment
Semiconductor test equipment
Signal generators and averages
Spark plug testing instruments, elec-
tric
Spectrum analyzers
Standard cells
Standards and calibration equipment
for electrical measuring, except
laboratory
Standing wave ratio measuring equip-
ment
Stroboscopes
Sweep generators
Sweep oscillators
Synchroscopes
Tachometer generators
Test equipment for electronic and
electrical circuits and equipment

Test sets, ignition harness
Time code generators
Transducers for volts, amperes, watts,
vars, frequency, and power factor
Transformers, instrument: portable
Tube testers
Voltmeters
Volt-ohm milliammeters
Watt-hour and demand meters, com-
bined
Watt-hour and time switch meters,
combined
Watt-hour meters, electric
Wattmeters
Waveform measuring and/or analyzing
equipment
X-Y recorders (plotters) except com-
puter peripheral equipment

3829 Measuring and Controlling Devices, Not Elsewhere Classified

Establishments primarily engaged in manufacturing measuring and controlling de-
vices, not elsewhere classified, including testing instruments to determine the physical
properties of materials, nuclear instruments, aircraft engine instruments, and liquid-
in-glass and bimetal thermometers.

Accelerometers, except aerospace type
Barometers, mercury and aneroid types
Cable testing machines
Compasses, magnetic: portable type
Count rate meters, nuclear radiation
Chronometers, electronic
Dynamometer instruments
Electrogamma ray loggers
Fare registers, for street cars, buses,
etc.
Fatigue testing machines, industrial:
mechanical
Fire detector systems, nonelectric
Fuel densitometers, aircraft engine
Fuel mixture indicators, aircraft engine
Fuel system instruments, aircraft
Fuel totalizers, aircraft engine
Gauges except electric, motor vehicle:
oil pressure, water temperature
Gauging instruments, thickness: ultra-
sonic
Geiger counters
Hardness testing equipment
Humidity instruments, except indus-
trial process and air-conditioning
type
Hydrometers, except industrial process
type
Hygrometers, except industrial process
type
Instrumentation for reactor controls,
auxiliary
Ion chambers
Kinematic test and measuring equip-
ment
Level gauges, radiation type
Medical diagnostic systems, nuclear
Moisture density meters, except indus-
trial process type
Nuclear instrument modules
Nuclear radiation detection and moni-
toring instruments

Personnel dosimetry devices
Physical properties testing and inspec-
tion equipment
Pressure and vacuum indicators, air-
craft engine
Pulse analyzers, nuclear monitoring
Radiation measuring and detecting
(radiac) equipment
Salinity indicators, except industrial
process type
Sample changers, nuclear radiation
Scalers, nuclear radiation
Scintillation detectors
Spectrometers, liquid scintillation and
nuclear
Stress, strain, and flaw detecting and
measuring equipment
Synchronizers, aircraft engine
Temperature sensors, except industrial
process and aircraft type
Testers for checking hydraulic controls
on aircraft
Testing equipment: abrasion, shearing
strength, tensile strength, torsion
Thermocouples, except industrial pro-
cess and aircraft type
Thermomagnetic oxygen analyzer
Thermometers, liquid-in-glass and bi-
metal type
Thrust power indicators, aircraft en-
gine
Toll booths, automatic
Transducers, pressure
Turnstiles, equipped with counting
mechanisms
Ultrasonic testing equipment
Vibration meters, analyzers, and cali-
brators
Viscometers, except industrial process
type
Whole body counters, nuclear

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OPTICAL INSTRUMENTS AND LENSES

3832 Optical Instruments and Lenses

Establishments primarily engaged in manufacturing instruments that measure an
optical property; apparatus except photographic that projects or magnifies such as
binoculars, prisms, and lenses; optical sighting and fire control equipment; and related
analytical instruments. Establishments primarily engaged in manufacturing eyeglass
lenses, frames, or fittings are classified in Industry 3851; separate computers in Indus-
try 3573; and electronic tracking and fire control systems in Industry 3862.

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Group Industry
No. No.

383 OPTICAL INSTRUMENTS AND LENSES—Continued

3832 Optical Instruments and Lenses—Continued

Aiming circles (fire control equipment)
 Antiaircraft directors, except electronic
 Binoculars
 Boards: plotting, spotting, and gun fire adjustment
 Borescopes
 Chromatographic equipment (laboratory type)
 Chronoscopes
 Clinetheodolites
 Coddington magnifying instruments
 Colorimeters (optical instruments)
 Contour projectors
 Correctors: percentage, wind, roll (sighting and fire control equipment)
 Coulometric analyzers, except industrial process type
 Dyna-lens
 Electron paramagnetic spin type apparatus
 Electrophoresis equipment
 Fiber optical devices
 Fuse setters (fire control equipment)
 Glasses, field or opera
 Gratings, diffraction
 Gun sights, optical
 Interferometers
 Laboratory analysis instruments, optical
 Lens coating
 Lens grinding, except ophthalmic
 Lens mounts
 Lenses, optical: photographic, magnifying, projection, and instrument
 Light sources, standard
 Lupes magnifying instruments, optical
 Magnifying instruments, optical
 Metallographs
 Meteorological instruments, optical
 Microprobes, electron
 Microprojectors
 Microscopes, except corneal
 Mirrors, optical
 Nephelometers
 Nuclear magnetic resonance type apparatus
 Optical comparators
 Optical elements and assemblies, except ophthalmic
 Optical measuring instruments
 Perimeters (optical instruments)
 Periscopes
 Ph meters
 Photometers
 Photomicrographic apparatus
 Phototheodolites
 Polariscopes
 Polarizers
 Prisms, optical
 Reflectors, optical
 Reflectoscopes
 Refractometers, except industrial process type
 Searchlight mirrors and reflectors
 Sighting and fire control equipment, optical
 Specific ion measuring instruments
 Spectrographs
 Spectrometers and spectroscopes, optical instruments
 Spyglasses
 Telescopes: elbow, panoramic, sighting, fire control, etc.
 Telescopic sights
 Titrometers
 Triplet magnifying instruments, optical
 Turbidimeters

384 SURGICAL, MEDICAL, AND DENTAL INSTRUMENTS AND SUPPLIES

3841 Surgical and Medical Instruments and Apparatus

Establishments primarily engaged in manufacturing medical, surgical, ophthalmic, and veterinary instruments and apparatus. Establishments primarily engaged in manufacturing surgical and orthopedic appliances are classified in Industry 3842; and electrotherapeutic, electromedical, and X-ray apparatus in Industry 3893.

Anesthesia apparatus
 Auriscopes
 Biopsy instruments and equipment
 Blood pressure apparatus
 Blood transfusion equipment
 Bone drills
 Bone plates and screws
 Bone rongeurs
 Bronchoscopes
 Cannulae
 Catheters
 Clamps, surgical
 Corneal microscopes
 Cystoscopes
 Diagnostic apparatus, physicians'
 Eye examining instruments and apparatus
 Fixation appliances, internal
 Forceps, surgical
 Gastrosopes
 Hemodialysis apparatus
 Holders, surgical needle
 Hypodermic needles and syringes
 Inhalation therapy equipment
 Inhalators, surgical and medical
 Instruments and apparatus: medical, surgical, ophthalmic, and veterinary
 IV transfusion apparatus
 Knives, surgical
 Metabolism apparatus
 Muscle exercise apparatus, ophthalmic
 Needle holders, surgical
 Needles, suture
 Operating tables
 Ophthalmic instruments and apparatus
 Ophthalmometers and ophthalmoscopes
 Optometers
 Otoroscopes
 Oxygen tents
 Pelvimeters
 Physiotherapy equipment, electrical
 Probes, surgical
 Retractors
 Rifles for propelling hypodermics into animals
 Retinoscopes
 Saws, surgical
 Skin grafting equipment
 Slit lamps (ophthalmic goods)
 Speculums
 Sphygmomanometers
 Stethoscopes and stethographs
 Suction therapy apparatus
 Surgical instruments and apparatus
 Surgical knife blades and handles
 Tonometers, medical
 Trocars
 Ultrasonic medical equipment
 Veterinarians' instruments and apparatus

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SURGICAL, MEDICAL, AND DENTAL INSTRUMENTS AND SUPPLIES—Con.

3842 Orthopedic, Prosthetic, and Surgical Appliances and Supplies

Establishments primarily engaged in manufacturing orthopedic, prosthetic, and surgical appliances and supplies, arch supports, and other foot appliances; fracture appliances, elastic hosiery, abdominal supporters, braces, and trusses; bandages; surgical gauze and dressings; sutures; adhesive tapes and medicated plasters; and personal safety appliances and equipment. Establishments primarily engaged in manufacturing surgical and medical instruments are classified in Industry 3841. Establishments primarily engaged in manufacturing appliances and in the personal fitting to the individual prescription of a physician are classified in trade industries.

- Abdominal supporters, braces, and trusses
- Absorbent cotton, sterilised
- Adhesive tape and plasters, medicated or nonmedicated
- Applicators, cotton tipped
- Atomizers, medical
- Autoclaves, hospital and surgical
- Bandages and dressings, surgical and orthopedic
- Bandages: plastic, muslin, plaster of paris, etc.
- Belts: sanitary, surgical, and corrective
- Braces, elastic
- Braces, orthopedic
- Bulletproof vests
- Canes, orthopedic
- Cervical collars
- Clothing, fire resistant and protective
- Colostomy appliances
- Corn remover pads, bunion pads, etc.
- Cosmetics, surgical
- Cosmetic restorations
- Cotton, absorbent: sterilised
- Cotton, including cotton balls, sterile and nonsterile
- Crutches and walkers
- Drapes, surgical: cotton
- Dressings, surgical
- Ear stoppers
- Elastic hosiery, orthopedic
- Extension shoes, orthopedic
- First aid, snake bite, and burn kits
- Foot appliances, orthopedic
- Fracture appliances, surgical
- Gas masks
- Gauze, surgical: not made in weaving mills
- Grafts, artificial: for surgery—made of braided or mesh artificial fibers
- Gynecological supplies and appliances
- Hearing aids
- Helmets, space
- Hosiery, support
- Hydrotherapy equipment
- Infant incubators

- Intra-uterine devices
- Iron lungs
- Life preservers, except cork and inflatable
- Ligatures, medical
- Limbs, artificial
- Linemen's safety belts
- Models, anatomical
- Noise protectors, personal
- Orthopedic devices and materials
- Pads, incontinent and bed
- Personal safety appliances and equipment
- Plugs, ear and nose
- Prosthetic appliances and supplies
- Radiation shielding aprons, gloves, sheeting, etc.
- Respirators
- Respiratory protection equipment, personal
- Restraints, patient
- Safety appliances and equipment, personal
- Safety gloves, all materials
- Socks, stump
- Space suits
- Splints, pneumatic and wood
- Sponges, surgical
- Sterilizers, hospital and surgical
- Stockinette, surgical
- Stretchers
- Suits, firefighting: asbestos
- Supports: abdominal, ankle, arch, kneecap, etc.
- Surgical appliances and supplies, except medical instruments
- Suspensories
- Sutures, absorbable and nonabsorbable
- Swabs, sanitary cotton
- Tongue depressors
- Traction apparatus
- Trusses; orthopedic and surgical
- Welders' hoods
- Wheelchairs
- Whirlpool baths, hydrotherapy equipment

8843 Dental Equipment and Supplies

Establishments primarily engaged in manufacturing artificial teeth, dental metals, alloys and amalgams, and a wide variety of equipment, instruments, and supplies used by dentists, dental laboratories, and dental colleges. Dental laboratories constructing artificial dentures, bridges, inlays, and other dental restorations on specifications from dentists are classified in Industry 8072.

Abrasive points, wheels, and disks:
dental
Autoclaves, dental
Broaches, dental
Burs, dental
Cabinets, dental
Cement, dental
Chairs, dentists'
Compounds, dental
Cutting instruments, dental

Dental alloys for amalgams
Dental engines
Dental equipment and supplies
Dental laboratory equipment
Dental metal
Denture materials
Drills, dental
Enamels, dentists'
Forceps, dental
Furnaces, laboratory: dental

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No. Industry
No.**384 SURGICAL, MEDICAL, AND DENTAL INSTRUMENTS AND SUPPLIES—Con.****3843 Dental Equipment and Supplies—Continued**

Glue, dental
Gold, dental
Hand pieces and parts, dental
Impression material, dental
Investment material, dental
Orthodontic appliances
Plaster, dental

Files, dental
Sterilizers, dental
Teeth, artificial: not made in dental
laboratories
Tools, dentists'
Ultrasonic dental equipment
Wax, dental

385 OPHTHALMIC GOODS**3851 Ophthalmic Goods**

Establishments primarily engaged in manufacturing ophthalmic frames, lenses, and sunglass lenses. Establishments primarily engaged in manufacturing slit lamps are classified in Industry 3841, and molded glass blanks in Industry 3229. Establishments primarily engaged in grinding lenses and fitting glasses to prescription are classified in trade.

Contact lenses
Eyeglasses, lenses, and frames
Eyes, glass and plastic
Frames and parts, eyeglass and spec-
tacle
Glasses, sun or glare
Goggles: sun, safety, industrial, under-
water, etc.
Lens grinding, ophthalmic

Lenses, ophthalmic
Lorgnettes
Magnifiers (readers and simple magni-
fiers)
Mountings, eyeglass and spectacle
Optical grinding service for the trade
Protectors, eye
Spectacles
Temples and fronts, ophthalmic

386 PHOTOGRAPHIC EQUIPMENT AND SUPPLIES**3861 Photographic Equipment and Supplies**

Establishments primarily engaged in manufacturing (1) photographic apparatus, equipment, parts, attachments, and accessories, such as still and motion picture cameras and projection apparatus; photocopy and microfilm equipment; blueprinting and diazotype (white printing) apparatus and equipment; and other photographic equipment; and (2) sensitized film, paper, cloth, and plates, and prepared photographic chemicals for use therewith. Establishments primarily engaged in manufacturing photographic paper stock (unsensitized), and paper mats, mounts, easels, and folders for photographic use are classified in Major Group 26; photographic lenses in Industry 3832; photographic glass in Major Group 32; chemicals for technical purposes, not specifically prepared and packaged for use in photography, in Major Group 28; and photographic flash, flood enlarger, and projection lamps in Industry 3841.

Aerial cameras
Blueprint cloth or paper, sensitized
Blueprint reproduction machines and
equipment
Brownprint paper and cloth, sensitized
Brownprint reproduction machines and
equipment
Cabinets, cassette film transfer
Cameras, microfilm
Cameras, still and motion picture: all
types
Densitometers
Developers, prepared photographic: not
made in chemical plants
Developing machines and equipment,
still or motion picture
Diaz (whiteprint) paper and cloth,
sensitized
Diazotype (whiteprint) reproduction
machines and equipment
Driers, photographic
Editing equipment, motion picture: re-
winds, viewers, titlers, splicers
Enlargers, photographic
Exposure meters, photographic
Film, sensitized: motion picture, X-
ray, still camera, and special purpose

Fixers, prepared photographic: not
made in chemical plants
Flashlight apparatus for photogra-
phers, except bulbs
Graphic arts plates, sensitized
Hangers: photographic film, plate, and
paper
Heat sensitized paper made from pur-
chased paper
Holders: photographic film, plate, and
paper
Lantern slide plates, sensitized
Lens shades, camera
Light meters, photographic
Metallic emulsion sensitized paper and
cloth, photographic
Microfilm equipment: cameras, pro-
jectors, readers, etc.
Motion picture apparatus and equip-
ment
Motion picture film
Photo reconnaissance systems
Photo equipment, all types
Photocopy machines
Photoflash equipment, except lamps
Photographic chemicals, prepared: not
made in chemical plants

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STANDARD INDUSTRIAL CLASSIFICATION

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No. No.

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PHOTOGRAPHIC EQUIPMENT AND SUPPLIES—Continued**3861 Photographic Equipment and Supplies—Continued**

Photographic equipment and accessories
Photographic instruments, electronic
Photographic paper and cloth, sensitized: all types
Photographic sensitized goods
Plates, photographic: sensitized
Printing equipment, photographic
Printing frames, photographic
Processing equipment, photographic
Projectors, still and motion picture:
 silent and sound
Range finders, photographic
Reels, film
Screens, projection
Sensitometers, photographic

Shutters, camera
Sound recording and reproducing equipment, motion picture
Stands, camera and projector
Stereopticons
Tanks: photographic developing, fixing, and washing
Toners, prepared photographic: not made in chemical plants
Trays, photographic printing and processing
Tripods, camera and projector
Washers, photographic print and film
X-ray film
X-ray plates, sensitized

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WATCHES, CLOCKS, CLOCKWORK OPERATED DEVICES, AND PARTS**3872 Watches, Clocks, Clockwork Operated Devices, and Parts**

Establishments primarily engaged in manufacturing clocks (including electric), watches, watchcases, mechanisms for clockwork operated devices, and clock and watch parts. This industry includes establishments primarily engaged in assembling clocks and watches from purchased movements and cases. Establishments primarily engaged in manufacturing time clocks are classified in Industry 3579, glass crystals in Industry 3281, and unbreakable crystals in Industry 8079.

Appliance timers
Chronographs, spring wound
Chronometers, spring wound
Clock materials and parts, except crystals and jewels
Clocks, assembling of
Clocks, including electric
Mechanisms for clockwork operated devices

Movements, watch or clock
Timers for industrial use, clockwork mechanism only
Watchcases
Watches and parts: except crystals and jewels

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Major Group 39.—MISCELLANEOUS MANUFACTURING INDUSTRIES*The Major Group as a Whole*

This major group includes establishments primarily engaged in manufacturing products not classified in any other manufacturing major group. Industries in this group fall into the following categories: jewelry, silverware and plated ware; musical instruments; toys, sporting and athletic goods; pens, pencils, and other office and artists' materials; buttons, costume novelties, miscellaneous notions; brooms and brushes; caskets; and other miscellaneous manufacturing industries.

Group Industry
No. No.

391 JEWELRY, SILVERWARE, AND PLATED WARE**3911 Jewelry, Precious Metal**

Establishments primarily engaged in manufacturing jewelry and other articles worn on or carried about the person, made of precious metals with or without stones (including the setting of stones where used), including cigarette cases and lighters, vanity cases and compacts; trimmings for umbrellas and canes; and jewel settings and mountings. Establishments primarily engaged in manufacturing costume jewelry from nonprecious metals and other materials are classified in Industry 3961.

Cases: cigar, cigarette, vanity—precious metal
Cigar lighters, precious metal
Cigarette lighters, precious metal
Collar buttons, precious metal and precious or semiprecious stones
Compacts, precious metal
Cuff buttons, precious metal and precious or semiprecious stones
Handbags, precious metal
Handles, umbrella and parasol: gold and silver
Jewel settings and mountings, precious metal
Jewelry, made of precious metal or precious or semiprecious stones

Jewelry polishing for the trade
Jewelry soldering, for the trade
Medals, of precious or semiprecious metals
Mountings, gold and silver: for pens, leather goods, umbrellas, etc.
Pins, precious metal
Rings, precious metal
Rosaries and other small religious articles, precious metal
Shirt studs, precious metal and precious or semiprecious stones
Soldering for the jewelry trade
Trimmings for canes, umbrellas, etc.—precious metal
Watchbands, precious metal

3914 Silverware, Plated Ware, and Stainless Steel Ware

Establishments primarily engaged in manufacturing flatware (including knives, forks, and spoons), hollow ware, toilet ware, ecclesiastical ware, and related products made of sterling silver; of metal plated with silver, gold, or other metal; of nickel silver; of pewter; or of stainless steel.

Carving sets: silver, nickel silver, and stainless steel (all metal)
Cutlery: silver, nickel silver, stainless steel, and plated (all metal)
Ecclesiastical ware: silver, nickel silver, pewter, and plated
Flatware: silver, nickel silver, pewter, stainless steel, and plated
Hollow ware: silver, nickel silver, pewter, stainless steel, and plated
Loving cups: silver, nickel silver, pewter, and plated

Silveramithing
Silverware: nickel silver, silver plated, solid silver, and sterling
Table and kitchen cutlery: silver, silver plated, and stainless steel
Toilet ware: silver, nickel silver, pewter, and plated
Trays: silver, nickel silver, pewter, stainless steel, and plated
Trophies: silver, nickel silver, pewter, and plated

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

391 JEWELRY, SILVERWARE, AND PLATED WARE--Continued

3915 Jewelers' Findings and Materials, and Lapidary Work

Establishments primarily engaged in manufacturing unassembled jewelry parts, and stock shop products such as sheet, wire, and tubing; and establishments of lapidaries primarily engaged in cutting, slabbing, tumbling, carving, engraving, polishing, or faceting stones from natural or man-made precious or semiprecious gem raw materials, either for sale or on a contract basis for the trade; in recutting, repolishing, and setting gem stones; or in cutting, drilling, and otherwise preparing jewels for instruments, dies, watches, chronometers, and other industrial uses. This industry includes the drilling, sawing, and peeling of real or cultured pearls, but does not include the manufacture of artificial pearls (Industry 8961).

Diamond cutting and polishing
Diamond points for phonograph
needles
Jewel bearings, synthetic
Jewel cutting, drilling, polishing, re-
cutting, or setting
Jewel preparing: for instruments,
tools, watches, and jewelry

Jewelers' findings and materials
Jewelry parts, unassembled
Lapidary work, contract and other
Pearls, drilling of
Pin stems (jewelry findings)
Stones: preparation of real and imita-
tion gems for settings

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MUSICAL INSTRUMENTS

3931 Musical Instruments

Establishments primarily engaged in manufacturing pianos, with or without player attachments; organs; other musical instruments; and parts and accessories for musical instruments.

Accordions and parts
Autophones (organs with perforated
music rolls)
Banjos and parts
Bassoons
Bells (musical instruments)
Blowers, pipe organ
Bugles and parts (musical instru-
ments)
Calliopes (steam organs)
Carillon bells
Cellos and parts
Chimes and parts (musical instru-
ments)
Clarinets and parts
Concertinas and parts
Cornets and parts
Cymbals and parts
Drummers' traps
Drums, parts, and accessories (musical
instruments)
Flutes and parts
Guitars and parts, electric and non-
electric
Harmonicas
Harps and parts
Harpichords
Horns, banjo and drum
Mandolins and parts

Marimbas
Mouthpieces for musical instruments
Music rolls, perforated
Music stands
Musical instrument accessories: reeds,
mouthpieces, stands, traps, etc.
Oboes
Ocarinas
Octophones
Organ parts and materials, except
organ hardware
Organs, all types: pipe, reed, hand,
street, barrel, electronic, player
Piano parts and materials, except piano
hardware
Pianos, all types: vertical, grand,
spinnet, player, coin-operated, etc.
Piccolos and parts
Saxophones and parts
Stringed musical instruments and
parts
Strings, musical instrument
Trombones and parts
Trumpets and parts
Ukeleles and parts
Vibraphones
Violins and parts
Xylophones and parts
Zithers and parts

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TOYS AND AMUSEMENT, SPORTING, AND ATHLETIC GOODS

3942 Dolls

Establishments primarily engaged in manufacturing dolls, doll parts, and doll clothing. Establishments primarily engaged in manufacturing stuffed toy animals are also included in this industry.

Animals, stuffed: toy
Dolls, doll parts, and doll clothing ex-
cept wigs

Toys, stuffed

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Group Industry
No. No.
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TOYS AND AMUSEMENT, SPORTING, AND ATHLETIC GOODS—Continued

3944 Games, Toys, and Children's Vehicles; Except Dolls and Bicycles

Establishments primarily engaged in manufacturing games and game sets for adults and children, and mechanical and nonmechanical toys. Important products of this industry include games such as chess, checkers, dominoes, puzzles, and other indoor games; and toys, such as toy furniture, doll carriages and carts, construction sets, mechanical trains, toy guns and air rifles, and other mechanical games and toys; baby carriages and strollers; children's velocipedes and tricycles, coaster wagons, play cars, sleds, and other children's outdoor wheel goods and vehicles, except bicycles (Industry 3751). Establishments primarily engaged in manufacturing dolls are classified in Industry 3942; and sporting and athletic goods for children and adults in Industry 3949.

Air rifles, toy
Airplanes, toy
Automobiles and trucks, toys
Automobiles, children's
Banks, toy
Baskets, toy
Bells, toy
Blocks, toy
Books, toy: picture and cutout
Carriages, baby
Cars, play (children's vehicles)
Craft and hobby kits and sets
Cycles, sidewalk: children's
Dishes, toy
Doll carriages and carts
Drums, toy
Engines, miniature
Erector sets, toy
Games for children and adults: puzzles,
bingo, marbles, poker chips, chess
Gocarts, children's
Guns, toy
Hobbyhorses
Horns, toy
Kites

Magic lanterns (toys)
Models, toy and hobby: airplane, boat,
ship, railroad equipment, etc.
Musical instruments, toy
Paint sets, children's
Pistols, toy
Poker chips
Rocking horses
Scooters, children's
Sleds, children's
Strollers, baby (vehicles)
Structural toy sets
Sulkies, baby (vehicles)
Tenders, baby (vehicles)
Toys: except dolls, children's vehicles,
and rubber toys
Trains and equipment, toy: electric and
mechanical
Tricycles
Vehicles except bicycles, children's
Velocipedes
Wagons, children's: coaster, express,
and play
Walkers, baby (vehicles)

3949 Sporting and Athletic Goods, Not Elsewhere Classified

Establishments primarily engaged in manufacturing sporting and athletic goods, not elsewhere classified, such as fishing tackle; golf and tennis goods; baseball, football, basketball, and boxing equipment; roller skates and ice skates; gymnasium and playground equipment; billiard and pool tables; and bowling alleys and equipment. Establishments primarily engaged in manufacturing athletic apparel are classified in Major Group 23, small arms ammunition in Industry 3482 and firearms in Industry 3484.

Ammunition belts, sporting type: of
all materials
Archery equipment
Arrows, archery
Athletic and sporting goods: except
clothing, firearms, and ammunition
Badminton equipment
Bait, fishing: artificial
Balls: baseball, basketball, football,
golf, tennis, pool, and bowling
Baseball equipment and supplies, ex-
cept uniforms
Bases, baseball
Basketball equipment and supplies, ex-
cept uniforms
Baskets, fish and bait
Bats: baseball, cricket, etc.
Billiard and pool balls, cues, cue tips,
and tables
Billiard chalk
Boomerangs
Bowling alleys and accessories
Bowling pin machines, automatic
Bowling pins
Bows, archery

Boxing equipment
Bridges, billiard and pool
Buckets, fish and bait
Cartridge belts, sporting type
Cases, gun and rod (sporting equip-
ment)
Creels, fish
Cricket equipment
Croquet sets
Decoys, duck and other game birds
Dumbbells
Exercising machines
Fencing equipment (sporting goods)
Fishing tackle (except lines, nets, and
seines)
Flies, artificial: for fishing
Floats, for fish lines
Footballs and football equipment and
supplies, except uniforms
Game calls
Gloves, sport and athletic: boxing,
baseball, handball, etc.
Golf carts, hand
Golfing equipment: caddy carts and
bags, clubs, tees, balls, etc.

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

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TOYS AND AMUSEMENT, SPORTING, AND ATHLETIC GOODS—Continued

3949 Sporting and Athletic Goods, Not Elsewhere Classified—Continued

Guards: football, basketball, soccer, lacrosse, etc.
Gymnasium and playground equipment
Helmets, athletic
Hockey equipment, except uniforms
Indian clubs
Lacrosse equipment
Mallets, polo, croquet, etc.
Masks: baseball, fencing, hockey, etc.
Nets: badminton, basketball, tennis, etc.—not made in weaving mills
Pads: football, basketball, soccer, lacrosse, etc.
Pigeons, clay (targets)
Pin setters for bowling, automatic
Playground equipment
Polo equipment, except apparel
Pool balls, pockets, tables, and equipment
Protectors: baseball, basketball, hockey, etc.
Rackets and frames: tennis, badminton, squash, lacrosse, etc.
Scoops, crab and fish
Shafts, golf club
Shooting equipment, except firearms and ammunition
Sinkers (fishing tackle)

Skates and parts, ice and roller
Skin diving equipment, scuba type: except clothing
Ski and skiing equipment, except apparel
Snowshoes
Soccer equipment, except apparel
Spears, fishing
Sporting goods: except clothing, firearms, and ammunition
Squash equipment, except apparel
Sticks: hockey, lacrosse, etc.
Striking (punching) bags
Strings, tennis racket
Swimming pools, plastic
Tables: billiard, pool, bagatelle, and ping pong
Target shooting equipment, except firearms and ammunition
Targets, archery and rifle shooting
Targets, clay
Tennis goods: balls, frames, rackets, etc.
Toboggans
Track and field athletic equipment, except apparel
Trap racks (clay targets)
Wading pools, plastic coated fabric

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PENS, PENCILS, AND OTHER OFFICE AND ARTISTS' MATERIALS

3951 Pens, Mechanical Pencils, and Parts

Establishments primarily engaged in manufacturing pens, pen points, fountain pens, ball point pens, refill cartridges, porous tipped felt tip markers, and parts.

Cartridges, refill: for ball point pens
Fountain pens and fountain pen desk sets
Markers, soft tip (felt, fabric, plastic, etc.)
Meter pens

Nibs (pen points): gold, steel, or other metal
Pen points: gold, steel, or other metal
Pencils and pencil parts, mechanical
Penholders and parts
Pens and pen parts: fountain, stylographic and ball point

3952 Lead Pencils, Crayons, and Artists' Materials

Establishments primarily engaged in manufacturing lead pencils, pencil leads, and crayons; and materials and equipment for art work, such as airbrushes, drawing tables and boards, palettes, sketch boxes, pantographs, artists' colors and waxes, pyrography goods, drawing inks, and drafting materials. Establishments primarily engaged in manufacturing mechanical pencils are classified in Industry 3951, and drafting instruments in Industry 3811.

Artists' materials, except drafting instruments
Boards, drawing: artists'
Boxes, sketching and paint
Brushes, air: artists'
Burnishers and cushions, gilders'
Canvas, artists': prepared on frames
Canvas board, artists'
Chalk: carpenters', blackboard, marking, artists', tailors', etc.
Colors, artists': water, oxide ceramic glass
Crayons: chalk, gypsum, charcoal, fusina, pastel, and wax
Drafting materials, except instruments
Drawing tables and boards, artists'
Easels, artists'
Enamels, china painting
Eraser guides and shields
Frames for artists' canvases
Friset paper (artists' material)
Gold or bronze mixtures, powders, paints, and sizes: artists'

Ink, drawing: black and colored
Lettering instruments, artists'
Maulsticks, artists'
Modeling clay
Paints, artists'
Paints for burnt wood or leather work, platinum
Paints for china painting
Palettes, artists'
Pantographs, for drafting
Pastels, artists'
Pencil holders
Pencil lead: black, indelible, or colored
Pencils and pencil parts, except mechanical
Pyrography materials
Sizes, artists': gold and bronze
Sketching boxes, artists'
Tracing cloth (drafting material)
Walnut oil, artists'
Water colors, artists'
Wax, artists'

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Group Industry
No. No.**395 PENS, PENCILS, AND OTHER OFFICE AND ARTISTS' MATERIALS—Continued****3953 Marking Devices**

Establishments primarily engaged in manufacturing rubber and metal hand stamps, dies, and seals; steel letters and figures; and stencils for use in painting or marking. Establishments primarily engaged in manufacturing felt tip markers are classified in Industry 3951.

Dies (hand seals)
Figures, metal
Hand stamps, stencils, and brands
Irons, marking or branding
Letters (marking devices), metal
Numbering stamps, with rubber type:
hand
Pads, inking and stamping
Paper stencils

Printing dies, rubber
Screens, textile printing
Seals, hand (dies)
Stamps, hand: time, date, postmark,
canceling, shoe and textile marking
Stencil machines (marking devices)
Stencils for use in painting and mark-
ing: metal, cardboard, etc.

3955 Carbon Paper and Inked Ribbons

Establishments primarily engaged in manufacturing carbon paper for business machines, sales books, etc.; spirit or gelatin process and other stencil paper; and inked or carbon ribbons for business machines.

Carbon paper for typewriters, sales
books, etc.
Ribbons, inked: typewriter, adding
machine, cash register, etc.

Stencil paper for typewriters
Stencil paper, gelatin or spirit process

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COSTUME JEWELRY, COSTUME NOVELTIES, BUTTONS, AND MISCELLANEOUS NOTIONS, EXCEPT PRECIOUS METAL**3961 Costume Jewelry and Costume Novelties, Except Precious Metal**

Establishments primarily engaged in manufacturing costume jewelry, costume novelties, and ornaments made of all materials, except precious metal, precious or semiprecious stones, and rolled gold plate and gold filled materials (Industry 3911).

Compacts, except precious metal and
solid leather
Costume jewelry, except precious metal
and precious or semiprecious stones
Novelties, costume: except precious
metal and gems
Ornaments, costume: except precious
metal and gems

Pearls, artificial
Rings, finger: gold plated wire
Rosaries and other small religious arti-
cles, except precious metal
Vanity cases, except precious metal
and leather
Watchbands, base metal

3962 Feathers, Plumes, and Artificial Trees and Flowers

Establishments primarily engaged in manufacturing artificial trees (including Christmas trees), flowers, fruits, and foliage made from all materials except glass; in producing fancy feathers, plumes, and articles made principally of feathers and plumes. Establishments primarily engaged in manufacturing artificial flowers, fruits, and foliage from glass are classified in Industry 3281.

Artificial and preserved flowers, foliage,
fruits, and vines: except glass
Christmas trees, artificial
Down (feathers)
Dusters, feather
Feathers: curling, dyeing, and reno-
vating—for the trade
Grasses, artificial and preserved: ex-
cept glass

Plants, artificial or preserved, except
glass
Plumes, feather
Trimmings, feather
Wreaths, artificial
Wreaths, garlands, and sprays: made
from tree boughs, cones, etc.

3963 Buttons

Establishments primarily engaged in manufacturing buttons, button parts, and button blanks and molds, of all materials except precious metal and precious or semiprecious stones (Industry 3911).

Button backs and parts
Button blanks and molds
Button coloring for the trade
Buttons, of all materials except pre-
cious metal or semiprecious stones

Collar buttons, except precious metal
and precious or semiprecious stones
Cuff buttons, except precious metal and
precious or semiprecious stones
Shirt studs, except precious metal and
precious or semiprecious stones

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

396

COSTUME JEWELRY, COSTUME NOVELTIES, BUTTONS, AND MISCELLANEOUS NOTIONS, EXCEPT PRECIOUS METAL—Continued**3964 Needles, Pins, Hooks and Eyes, and Similar Notions**

Establishments primarily engaged in manufacturing notions, such as machine and hand needles, pins, hooks and eyes, eyelets, buckles, and slide and snap fasteners.

Buckle blanks and molds
Buckles and buckle parts, except shoe buckles
Curlers, hair: except equipment designed for beauty parlor use
Eyelets, metal: for clothing, fabrics, boots and shoes, paper, etc.
Fasteners: glove, slide, snap, and hook-and-eye
Hair curlers, except equipment designed for beauty parlor use

Hairpins, except rubber
Hooks and eyes
Hooks, crochet
Needles, hand and machine
Pins, except jewelry: toilet, safety, hat-pins, hairpins—steel or brass
Tape, hook-and-eye and snap fastener
Zippers (slide fasteners)

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MISCELLANEOUS MANUFACTURING INDUSTRIES**3991 Brooms and Brushes**

Establishments primarily engaged in manufacturing household, industrial, and street sweeping brooms; and brushes, such as paintbrushes, toothbrushes, toilet brushes, and household and industrial brushes.

Artists' brushes, hand
Brooms, hand and machine: bamboo, wire, fiber, splint or other material
Brushes for vacuum cleaners, carpet sweepers, and other rotary machines
Brushes, household and industrial
Hair pencils (artists' brushes)
Paint brushes
Paint rollers

Push brooms
Shaving brushes
Street sweeping brooms, hand and machine
Toilet brushes
Toothbrushes, except electric
Varnish brushes
Whisk brooms

3993 Signs and Advertising Displays

Establishments primarily engaged in manufacturing electrical, mechanical, cutout, or plate signs and advertising displays, including neon signs and advertising novelties. Sign painting shops doing business on a custom basis are classified in Industry 7399. Establishments primarily engaged in manufacturing electric signal equipment are classified in Industry 3662, and commercial lighting fixtures in Industry 3646.

Advertising displays, except printed
Advertising novelties
Cutouts and displays, window and lobby
Displays, paint process
Electrical signs and advertising displays

Letters for signs, metal
Name plates, metal: except engraved, etched, etc.
Neon signs
Scoreboards, electric
Signs, not made in custom sign painting shops

3995 Burial Caskets

Establishments primarily engaged in manufacturing burial caskets and cases including shipping cases of wood or other material except concrete. Establishments primarily engaged in producing other goods for use by morticians are classified on the basis of the product, such as burial garments in Major Group 23.

Burial cases, metal and wood
Burial vaults, fiberglass
Casket linings

Caskets, metal and wood
Grave vaults, metal

3996 Linoleum, Asphalted-Felt-Base, and Other Hard Surface Floor Coverings, Not Elsewhere Classified

Establishments primarily engaged in manufacturing linoleum, asphalted-felt-base, and other hard surface floor coverings, not elsewhere classified. Establishments primarily engaged in manufacturing rubber floor coverings are classified in Industry 3069, and cork floor and wall tile in Industry 2499.

Carpets, asphalted-felt-base (linoleum)
Floor coverings, asphalted-felt-base (linoleum)

Hard surfaced floor coverings, except rubber and cork
Linoleum
Tile, floor: supported plastic

MANUFACTURING

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Group Industry
No. No.
399

MISCELLANEOUS MANUFACTURING INDUSTRIES—Continued**3999 Manufacturing Industries, Not Elsewhere Classified**

Establishments primarily engaged in manufacturing miscellaneous fabricated products, including beauty shop and barber shop equipment; hair work; tobacco pipes and cigarette holders; coin-operated amusement machines; matches; candles; lamp shades; dressed and dyed furs; umbrellas; parasols and canes; and other articles, not elsewhere classified.

Advertising curtains
Amusement machines, coin-operated:
except coin-operated phonographs
Atomizers, other than medical
Badges, for policemen, firemen, etc.—
metal
Barber shop equipment
Barbers' clippers, hand and electric
Beach umbrellas
Beaded novelties
Beads, unassembled
Beauty shop equipment
Beekeeping supplies, except wood
Bone novelties
Book matches
Boutiquing: decorating gift items with
sequins, fruit, etc., for the trade
Bric-a-brac
Bristles, dressing of
Burnt wood articles
Buttons: Red Cross, union, identifica-
tion
Calendars, framed
Candles
Cane and cane trimmings, except pre-
cious metal
Chairs, hydraulic: barber and beauty
shop
Christmas tree ornaments, except elec-
trical and glass
Cigar and cigarette holders
Cigarette filters, not made in chemical
plants
Cigarette lighter flints
Cleaners, pipe and cigarette holder
Combs, except hard rubber
Curlers, hair: designed for beauty
parlors
Curls, artificial (hair)
Decalcomania work, except on china
or glass: for the trade
Desk pads, except paper
Doll wigs (hair)
Dressing of furs: bleaching, blending,
currying, scraping, and tanning
Driers, hair: designed for beauty
parlors
Embroidery kits
Figures, wax: mannikins, etc.
Fingerprint equipment, except cameras
and optical equipment
Fire extinguishers, portable
Flocking metal products for the trade
Fly swatters
Forms: display, dress, and show—ex-
cept shoe display forms
Frames and handles, handbag and lug-
gage: except precious metal
Fur stripping
Furniture, beauty shop and barber
shop
Furs, dressed: bleached, curried,
scraped, tanned, and dyed
Games, coin-operated: pinball and
other
Globes, geographical
Gold stamping for the trade, except
books
Grenades, hand (fire extinguishers)
Grinding purchased nut shells
Hair clippers for human use, hand and
electric

Hair, dressing of, for the trade
Hair goods: braids, nets, switches,
toupees, wigs, etc.
Hairpin mountings
Hat blocks and display forms
Honeycomb foundations (beekeepers'
supplies)
Hosiery kits, sewing and mending
Identification plates
Identification tags, except paper
Lamp shade frames
Lighters, cigar and cigarette: except
precious metal and electric
Mannikins and display forms
Marionettes (puppets)
Massage machines, electric: designed
for beauty and barber shops
Matches and match books
Military insignia, except textile
Models, except toy and hobby airplane,
boat, ship, railroad, etc.
Mosaics: ivory, shell, horn, and bone
Mountings, comb and hairpin: except
precious metal
Musical chests
Novelties: bone, beaded, and shell
Pads, permanent waving
Painting instrument dials, for the
trade
Parasols and frames: handles, parts,
and trimmings—except precious
metal
Pelts: scraping, currying, tanning,
bleaching, and dyeing
Permanent wave equipment and ma-
chines
Picture plaques, laminated
Pipes, pipestems, and bits: tobacco—
except hard rubber
Plaques, picture: laminated
Preparation of slides and exhibits, for
classroom use
Printing eyeglass frames for the trade
Puppets
Scenery for theaters, opera houses,
halls, and schools
Sewing kits, novelty: other than sew-
ing cases and cabinets
Shades, lamp and candle: except glass
and metal
Shell novelties
Shoe patterns
Slot machines
Smokers, bee (beekeepers' supplies)
Soap dispensers
Sponges, bleaching and dyeing of
Stage hardware and equipment, except
lighting equipment
Stereographs, photographic
Sterilizers, beauty and barber shop
Straw goods
Stringing beads for the trade
Tape measures
Tear gas devices and equipment
Tinzel
Transformations, hair
Treating clock and watch dials with
luminous material
Umbrellas and parts, except precious
metal
Umbrellas: beach, garden, and wagon
Vells made of hair

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

399

MISCELLANEOUS MANUFACTURING INDUSTRIES—Continued

3999 Manufacturing Industries, Not Elsewhere Classified—Continued

Vibrators, electric: designed for beauty
and barber shops
Walnut shell flourWigs, including doll wigs, toupees or
wiglets, except custom made
Wind chimes
Wool pulling

Division E

Transportation, Communications, Electric, Gas, and Sanitary Services

The Division as a Whole

This division includes establishments providing to the general public or to other business enterprises passenger and freight transportation, communication services, electricity, gas, steam, water or sanitary services, and the U.S. Postal Service.

For many of the industries in this division, the establishments have activities, workers, and physical facilities distributed over an extensive geographic area. For this division, the establishment is represented by a relatively permanent office, shop, station, terminal, warehouse, etc. which is either (1) directly responsible for supervising such activities, or (2) the base from which personnel operate to carry out these activities. Many of the industries are engaged in various related activities. For example, establishments concerned with supplying electric energy, including the generating station, the network or system of transmission and distribution facilities, as well as maintenance, repair, and meter reading are all classified in the same electric services industry.

Those establishments which perform such activities as maintenance and repair of the physical facilities, and repair of railroad cars and engines are classified as Construction or Manufacturing if they serve other companies, but are included here if they do not. Separate industries are included in this division for terminal and maintenance services, where they are important, but otherwise these activities are included with the industries which they serve. Locations engaged in activities such as sales of electric appliances to household consumers, or in manufacturing ice are classified in Retail Trade and Manufacturing, respectively, if separate records are available.

The establishments classified in this division furnish services to the general public or to other business enterprises; establishments which furnish similar services only to other establishments of the same enterprise are classified as auxiliary to the establishments or units of the enterprise which they serve. However, separate establishments primarily engaged in long-distance hauling, stevedoring, water transportation or pipe line transportation are classified according to their activity and not as auxiliaries, even though they serve only establishments of the same company.

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STANDARD INDUSTRIAL CLASSIFICATION

Major Group 40.—RAILROAD TRANSPORTATION*The Major Group as a Whole*

This major group includes establishments furnishing transportation by line-haul railroad, as well as REA Express, and switching and terminal establishments. Railways serving a single municipality, contiguous municipalities, or a municipality and its suburban areas are classified in Major Group 41. Other services related to railroad transportation are classified in Major Group 47. Any analysis of railway statistics should include lessors of railway property classified in Industry 6517.

Group No. Industry No.

401 RAILROADS**¹ 4011 Railroads, Line-haul Operating**

Establishments primarily engaged in line-haul railroad operations. Railways engaged primarily in serving a single municipality, contiguous municipalities, or a municipality and its suburban areas are classified in Major Group 41.

Electric railroads
Interurban railways

Railroads, line-haul operating
Railroads, steam

¹ 4013 Switching and Terminal Establishments

Establishments primarily engaged in the furnishing of terminal facilities for rail passenger or freight traffic for line-haul service, and in the movement of railroad cars between terminal yards, industrial sidings, etc. Terminal companies do not necessarily operate any vehicles themselves, but may operate the stations and terminals. Non-operating companies which are lessors of railway property are classified in Industry 6517.

Belt line railroads
Logging railroads
Railroad terminals

Stations, operated by railway terminal companies

404 RAILWAY EXPRESS SERVICE**4041 Railway Express Service**

This industry includes only the REA Express.

Railway express service

REA Express

¹ Supplementary code for Industries 4011 and 4013:

1 Class I

Companies regulated by the Interstate Commerce Commission having 3-year average operating revenues generally of \$5,000,000 or more.

2 Class II

Companies regulated by the Interstate Commerce Commission having 3-year average operating revenues generally below \$5,000,000.

3 Other

Companies not regulated by the Interstate Commerce Commission.

TRANSPORTATION AND PUBLIC UTILITIES

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Major Group 41.—LOCAL AND SUBURBAN TRANSIT AND INTERURBAN HIGHWAY PASSENGER TRANSPORTATION*The Major Group as a Whole*

This major group includes establishments primarily engaged in furnishing local and suburban passenger transportation, such as those providing passenger transportation within a single municipality, contiguous municipalities, or a municipality and its suburban areas by bus, rail, or subway, either separately or in combination, and establishments engaged in furnishing transportation to local scenic features. Also included are establishments primarily engaged in furnishing highway passenger transportation and establishments furnishing highway passenger terminal or maintenance facilities. Intercity bus lines are included in this major group, but interurban railways are classified in Major Group 40.

Group Industry
No. No.

411 LOCAL AND SUBURBAN PASSENGER TRANSPORTATION

Establishments primarily engaged in furnishing passenger transportation confined principally to a municipality, contiguous municipalities, or a municipality and its suburban areas, other than by taxicab, school bus, or charter service.

*** 4111 Local and Suburban Transit**

Establishments primarily engaged in furnishing local and suburban mass passenger transportation over regular routes and on regular schedules. Such transportation may involve use of one or more modes of transportation. Establishments primarily engaged in furnishing passenger transportation by automobile or bus to, from, or between airports or rail terminals over regular routes are included in this industry.

Airport transportation service, local
Bus line operation, local
City and suburban bus line operation
Elevated railway operation
Local railway operation
Passenger transportation, regular
route: between airports and terminals

Street railway operation
Suburban and urban railway operation
Subway operation
Trolley coach operation

*** 4119 Local Passenger Transportation, Not Elsewhere Classified**

Establishments primarily engaged in furnishing miscellaneous passenger transportation, where such operations are principally within a municipality, contiguous municipalities, or a municipality and its suburban areas. Establishments primarily engaged in renting passenger automobiles without drivers are classified in Industry 7512. Establishments primarily operating ski lifts, tows, and other recreational lifts are classified in Industry 7990.

Aerial tramways, except amusement
and scenic
Ambulance service
Automobile rental, with drivers

Cog railways
Hearse and limousine rental: with
drivers
Sightseeing buses

412 TAXICABS**4121 Taxicabs**

Establishments primarily engaged in furnishing passenger transportation by automobiles not operated on regular schedules or between fixed terminals. Taxicab fleet owners and organizations are included, regardless of whether drivers are hired or rent their cabs or are otherwise compensated. Establishments primarily engaged in furnishing passenger transportation by automobile or bus, to, from, or between airports or rail terminals, over regular routes, are classified in Industry 4111. Taxicab associations and similar organizations which do not operate taxicabs, but supply maintenance and repair services to their members, are classified in Industry 4172.

Taxicab operation

* See footnote at bottom of page 222.

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STANDARD INDUSTRIAL CLASSIFICATION

Group No.	Industry No.
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418 INTERCITY AND RURAL HIGHWAY PASSENGER TRANSPORTATION

* 4131 Intercity and Rural Highway Passenger Transportation

Establishments primarily engaged in furnishing passenger transportation by motor vehicles, the operations of which are principally outside a single municipality, outside one group of contiguous municipalities, and outside a single municipality and its suburban areas. Chartered passenger transportation is classified in Major Group 414.

Bus lines, intercity
Intercity bus lines
Intercity motor vehicle highway pas-
senger transportation, special serv-
ice

Interstate bus lines
Interurban bus lines

414 PASSENGER TRANSPORTATION CHARTER SERVICE

*** 4141 Local Passenger Transportation Charter Service**

Establishments primarily engaged in furnishing passenger transportation charter service where such operations are principally within a single municipality, contiguous municipalities, or a municipality and its suburban areas.

Bus charter service, local

*4142 Passenger Transportation Charter Service, Except Local

Establishments primarily engaged in furnishing passenger transportation charter service where such operations are principally outside a single municipality, outside one group of contiguous municipalities, or outside a single municipality and its suburban areas.

Bus charter service, except local

415 SCHOOL BUSES

4151 School Buses

Establishments primarily engaged in operating buses to transport pupils to and from school. School bus establishments operated by educational institutions should be treated as auxiliaries.

School buses

417 **TERMINAL AND SERVICE FACILITIES FOR MOTOR VEHICLE PASSENGER
TRANSPORTATION**

4171 Terminal and Joint Terminal Maintenance Facilities for Motor Vehicle Passenger Transportation

Establishments primarily engaged in the operation of passenger terminals which are used by highway passenger vehicles operated by others. Also included are such terminal establishments which also provide maintenance and service for motor vehicles operated in common or contract passenger service by others.

Bus terminal operation

[†] Supplementary codes for Industries 4111, 4119, 4121, 4141, and 4142:

1 Class I

Companies holding certificates or permits issued by the Interstate Commerce Commission and having 3-year average operating revenues of \$1,000,000 or more.

2 Class II and Class III

Companies holding certificates or permits issued by the Interstate Commerce Commission and having 3-year average operating revenues below \$1,000,000.

3 Other

Companies not regulated by the Interstate Commerce Commission.

TRANSPORTATION AND PUBLIC UTILITIES

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Group Industry
No. No.

417 **TERMINAL AND SERVICE FACILITIES FOR MOTOR VEHICLE PASSENGER
TRANSPORTATION—Continued**

4172 Maintenance and Service Facilities for Motor Vehicle Passenger Transportation

Establishments primarily engaged in servicing and maintaining motor vehicles operated in common or contract passenger carriage by others. Establishments primarily engaged in the operation of highway passenger terminals in combination with maintenance and servicing of vehicles are classified in Industry 4171; and those which provide for motor vehicle maintenance or service for the general public are classified in Industry 7588.

Maintenance facilities for motor vehicle passenger transportation

Major Group 42.—MOTOR FREIGHT TRANSPORTATION AND WAREHOUSING

The Major Group as a Whole

This major group includes establishments furnishing local or long-distance trucking, or transfer services, or those engaged in the storage of farm products, furniture and other household goods, or commercial goods of any nature. The operation of terminal facilities for handling freight, with or without maintenance facilities, is also included. Establishments primarily engaged in the storage of natural gas are classified in Industry 4922. Field warehousing is classified in Industry 7399.

Group Industry
No. No.

421 TRUCKING, LOCAL AND LONG DISTANCE

* 4212 Local Trucking Without Storage

Establishments primarily engaged in furnishing trucking or transfer services without storage, in a single municipality, contiguous municipalities, or a municipality and its suburban areas. Establishments primarily engaged in collecting and disposing of refuse by processing or destruction of materials are classified in Industry 4958; removal of overburden from mines or quarries in Division B; and contractors hauling dirt, rock, etc., in Division C.

Baggage transfer
Carting, by truck or horse drawn wagon
Collecting and transporting refuse, without disposal
Debris removal, carting only
Delivery service, vehicular
Draying, local: without storage
Farm to market hauling
Furniture moving, local: without storage
Garbage and refuse, collecting and transporting: without disposal

Hauling, by dump truck
Hauling live poultry: on a contract or fee basis
Local trucking, without storage
Log trucking
Mail carriers, contract
Motorcycle delivery service
Package delivery, by truck
Parcel delivery, by truck
Safe moving
Star routes
Truck rental, with drivers
Trucking timber

* 4213 Trucking, Except Local

Establishments primarily engaged in furnishing "over the road" trucking service either as common carriers or under special and individual contracts or agreements.

Long-distance trucking
"Over the road" trucking

Trucking, except local

* 4214 Local Trucking With Storage

Establishments primarily engaged in furnishing trucking and storage services, including household goods, in a single municipality, contiguous municipalities, or a municipality and its suburban areas. Warehousing and storage of household goods when not combined with trucking is classified in Industry 4224.

Furniture moving, local: combined with storage
Household goods moving, local: combined with storage

Trucking, local: combined with storage

* Supplementary codes for Industries 4212, 4213, and 4214:

1 Class I Common Carriers

Common carriers of motor freight holding certificates or permits issued by the Interstate Commerce Commission with 3-year average operating revenues of \$1,000,000 or more.

2 Class II Common Carriers

Common carriers of motor freight holding certificates or permits issued by the Interstate Commerce Commission with 3-year average operating revenues of \$300,000 but less than \$1,000,000.

Footnote continued on following page.

TRANSPORTATION AND PUBLIC UTILITIES

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Group Industry
No. No.

422

PUBLIC WAREHOUSING**4221 Farm Product Warehousing and Storage**

Establishments primarily engaged in the storage of farm products. Refrigerated warehousing is classified in Industry 4222.

Bean cleaning and warehousing
Bean elevators, except sales
Cotton compresses and warehouses
Farm product warehousing and storage, other than cold storage

Grain elevators, storage only
Potato cellars
Tobacco warehousing and storage
Wool and mohair warehousing

4222 Refrigerated Warehousing

Establishments primarily engaged in the storage of perishable goods under refrigeration. The establishments may also rent locker space for the storage of food products for individual households, and provide incidental services for processing, preparing, or packaging such food for storage. Establishments primarily selling frozen foods for home freezers (freezer and locker meat provisioners) are classified in Industry 5422.

Cheese warehouses
Cold storage locker rental
Food lockers, rental

Frozen food locker rental
Warehousing, cold storage or refrigerated

4224 Household Goods Warehousing and Storage

Establishments primarily engaged in the storage of household goods, but not engaged in local trucking.

Furniture storage, without local trucking

Household goods, warehousing and storage: without local trucking

4225 General Warehousing and Storage

Establishments primarily engaged in the warehousing and storage of a general line of goods. Field warehousing is classified in Industry 7390.

General warehousing and storage

4226 Special Warehousing and Storage, Not Elsewhere Classified

Establishments primarily engaged in the storage of special products, not elsewhere classified, such as automobiles (dead storage only), furs (for the trade), textiles, whisky, and goods at foreign trade zones. Warehouses primarily engaged in the blending of wines are classified in Industry 5182.

Automobile dead storage
Fur storage, for the trade
Lumber terminals (storage for hire)
Oil and gasoline storage caverns (for hire)
Petroleum and chemical bulk stations and terminals for hire

Storage of goods at foreign trade zones
Storage, special: except farm product, cold storage, and household goods
Textile warehousing
Warehousing, special: except cold storage, farm, and household goods
Whisky warehousing

3 Class III Common Carriers

Common carriers of motor freight holding certificates or permits issued by the Interstate Commerce Commission with 3-year average operating revenues of below \$300,000.

4 Class I Contract Carriers

Contract carriers of motor freight holding certificates or permits issued by the Interstate Commerce Commission with 3-year average operating revenues of \$1,000,000 or more.

5 Class II Contract Carriers

Contract carriers of motor freight holding certificates or permits issued by the Interstate Commerce Commission with 3-year average operating revenue of \$300,000 but less than \$1,000,000.

6 Class III Contract Carriers

Contract carriers of motor freight holding certificates or permits issued by the Interstate Commerce Commission with 3-year average operating revenues of below \$300,000.

445-987-72-15

STANDARD INDUSTRIAL CLASSIFICATION

423

TERMINAL AND JOINT TERMINAL MAINTENANCE FACILITIES FOR MOTOR FREIGHT TRANSPORTATION

4231 Terminal and Joint Terminal Maintenance Facilities for Motor Freight Transportation

Establishments primarily engaged in the operation of terminal facilities used by highway-type property carrying vehicles operated by others. Also included are such terminal establishments which also provide maintenance and service for motor vehicles operated in common or contract property carrying service by others. Establishments primarily engaged in the repair of trucks are classified in Industry 7538.

Freight trucking terminals, with or without maintenance facilities

TRANSPORTATION AND PUBLIC UTILITIES

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Major Group 43.—U.S. POSTAL SERVICE

This major group includes only the U.S. Postal Service. Post Office contract stations are classified in Industry 7399. Establishments primarily transporting mail on a contract basis for the U.S. Postal Service are classified in Group 421. Private postal services are classified in Industry 7319 (delivery of advertising matter) or Group 421 (delivery of parcels).

Group No.	Industry No.
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431	U.S. POSTAL SERVICE
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4311	U.S. Postal Service
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This industry includes only the U.S. Postal Service.

U.S. Postal Service

Major Group 44.—WATER TRANSPORTATION⁴*The Major Group as a Whole*

This major group includes establishments engaged in freight and passenger transportation on the open seas or inland waters, and establishments furnishing such incidental services as lighterage, towing, and canal operation. This major group also includes excursion boats, sightseeing boats, and water taxis. Cargo handling operations when carried on by transportation companies and separately reported are classified in Industry 4463. When separate reports for cargo handling are not available, these operations are classified with the transportation establishment. Establishments engaged in the operation of charter or party fishing boats are classified in Industry 7999.

Group Industry
No. No.

441 DEEP SEA FOREIGN TRANSPORTATION**4411 Deep Sea Foreign Transportation**

Establishments primarily engaged in operating vessels for the transportation of freight or passengers on the deep seas between the United States and foreign ports. Establishments operating vessels which travel to foreign ports and also to noncontiguous territories are classified in this industry.

Deep sea foreign transportation

442 DEEP SEA DOMESTIC TRANSPORTATION**4421 Transportation To and Between Noncontiguous Territories**

Establishments primarily engaged in operating vessels for the transportation of freight or passengers on the deep seas between the United States mainland and Alaska, Hawaii, the Panama Canal Zone, Puerto Rico, and island possessions or protectorates and between such places.

Domestic transportation, deep sea
Water transportation to noncontiguous
territories

4422 Coastwise Transportation

Establishments primarily engaged in operating vessels for the transportation of freight or passengers on the deep seas between mainland United States ports, between those located solely on the Atlantic coast and Gulf coast, or between those located solely on the Pacific coast. Also included are those operations limited to the coasts of Alaska, Hawaii, or Puerto Rico. Establishments performing intracoastal transportation in inland waterway service on the intracoastal waterways paralleling the Atlantic and Gulf coasts are classified in Industry 4441.

Coastwise transportation

⁴ Supplementary code for Major Group 44.—Type of operation:**1 Common Carriers**

Companies primarily engaged in operating vessels to serve the general public. Frequently these companies operate over fixed routes and on fixed schedules.

2 Contract Carriers—ocean shipping

Companies primarily engaged in operating vessels under special contracts or agreements for the transportation of goods of others or of passengers.

3 Contract Carriers—inland and Great Lakes shipping

Companies primarily engaged in operating vessels and/or towing services principally under special contracts or agreements.

4 Private Carriers

Separate corporations carrying only the goods of corporations to which they are subsidiary.

TRANSPORTATION AND PUBLIC UTILITIES

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Group Industry
No. No.**442 DEEP SEA DOMESTIC TRANSPORTATION—Continued****4422 Intercoastal Transportation**

Establishments primarily engaged in operating vessels for the transportation of freight or passengers on the deep seas between ports on the United States Atlantic and Gulf coasts on the one hand, and United States Pacific coast ports on the other, via the Panama Canal.

Intercoastal transportation

443 GREAT LAKES-ST. LAWRENCE SEAWAY TRANSPORTATION**4431 Great Lakes-St. Lawrence Seaway Transportation**

Establishments primarily engaged in the transportation of freight or passengers on the Great Lakes and St. Lawrence Seaway, either between United States ports or between United States and Canadian ports.

Ferries operating on the Great Lakes
and St. Lawrence Seaway

Great Lakes and St. Lawrence Seaway
transportation

444 TRANSPORTATION ON RIVERS AND CANALS**4441 Transportation on Rivers and Canals**

Establishments primarily engaged in transporting freight or passengers on all inland waterways, including the intracoastal waterway on the Atlantic and Gulf coasts. Transportation on the Great Lakes-St. Lawrence Seaway is classified in Industry 4431; local water transportation including intraport transportation in Group 445; and the maintenance and operation of canals primarily for use by the vessels of others in Industry 4464.

Canal barge operation
Canal transportation
Intracoastal transportation
Lake transportation, other than on the
Great Lakes

Log rafting and towing
River transportation, other than on the
St. Lawrence Seaway
Transportation on bays and sounds of
the ocean

445 LOCAL WATER TRANSPORTATION**4452 Ferries**

Establishments primarily engaged in operating ferries across rivers or within harbors. Establishments operating ferries across the Great Lakes are classified in Industry 4431.

Car lighters (ferries)
Ferries operating across rivers or
within harbors

Intraport transportation
Railroad ferries

4453 Lighterage

Establishments primarily engaged in operating lighters and other harbor vessels for transferring goods and passengers between ship and shore or from one ship to another.

Lighterage

4454 Towing and Tugboat Service

Establishments primarily engaged in furnishing marine towing and tugboat services in the performance of auxiliary or terminal services in harbor areas. The vessels used in performing these services do not carry cargo or passengers.

Docking of ocean vessels
Marine towing
Shifting of floating equipment within
harbors

Tugboat service
Undocking of ocean vessels

4459 Local Water Transportation, Not Elsewhere Classified

Establishments primarily engaged in furnishing local water transportation, not elsewhere classified, such as excursion boats, sightseeing boats, and water taxis.

Airboats (swamp buggy rides)
Excursion boat operation

Sightseeing boats
Water taxis, operation of

STANDARD INDUSTRIAL CLASSIFICATION

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SERVICES INCIDENTAL TO WATER TRANSPORTATION

4463 Marine Cargo Handling

Establishments primarily engaged in activities directly related to marine cargo handling from the time cargo, for or from a vessel, arrives at shipside, dock, pier, terminal, staging area, or intransit area until cargo loading or unloading operations are completed. Cargo handling operations carried on by transportation companies and separately reported are classified here. This industry includes the operation and maintenance of piers, docks, and associated buildings and facilities; but lessors of such facilities are classified in Industry 6512.

Docks, including buildings and facilities: operation and maintenance
Loading vessels
Marine cargo handling
Piers, including buildings, and facilities: operation and maintenance

Ship hold cleaning
Stevedoring
Terminal operation, waterfront
Unloading vessels
Waterfront terminal operation

4464 Canal Operation

Establishments primarily engaged in the maintenance and operation of canals.

Canal operation

4469 Water Transportation Services, Not Elsewhere Classified

Establishments primarily engaged in furnishing miscellaneous services incidental to water transportation, not elsewhere classified, such as boat hiring, except for pleasure; chartering of vessels; ship cleaning, except hold cleaning (Industry 4468); and steamship leasing. Establishments primarily engaged in the operation of charter or party fishing boats or rental of small recreational boats are classified in Industry 7999.

Boat hiring, except pleasure
Boat livery, except pleasure
Boat rental, commercial
Boat yards, storage and incidental
 repair
Boathouses, commercial
Cargo salvaging, from distressed ves-
 sels
Chartering of commercial boats
Dismantling ships
Marinas
Marine basins, renting and operating
Marine salvaging

Marine surveyors, except cargo
Marine wrecking: salvaging from
sunken craft, removing underwater
hazards
Marine wrecking: ships for scrap
Oil spill cleanup
Piloting vessels in and out of harbors
Ship cleaning, except hold cleaning
Ship registers: survey and classifica-
tion of ships and marine equipment
Steamship leasing
Yacht basins, operation of

TRANSPORTATION AND PUBLIC UTILITIES

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Major Group 45.—TRANSPORTATION BY AIR*The Major Group as a Whole*

This major group includes establishments engaged in furnishing domestic and foreign transportation by air and also those operating airports and flying fields and furnishing terminal services. Establishments primarily engaged in performing services which may incidentally use airplanes (crop dusting, aerial photography, etc.) are classified according to the service performed.

Group Industry
No. No.

451 AIR TRANSPORTATION, CERTIFICATED CARRIERS**4511 Air Transportation, Certificated Carriers**

Establishments of companies holding certificates of public convenience and necessity under the Civil Aeronautics Act, operating over fixed routes on fixed schedules, or in the case of certificated Alaskan carriers over fixed or irregular routes. These companies may be primarily engaged in the transportation of revenue passengers or in the transportation of cargo or freight.

Air cargo carriers, certificated
Air passenger carriers, certificated

Air transportation by certificated carriers
Helicopter carriers, certificated

452 AIR TRANSPORTATION, NONCERTIFICATED CARRIERS**4521 Air Transportation, Noncertificated Carriers**

Establishments of companies permitted to operate without a showing of public convenience and necessity under the Civil Aeronautics Act, including noncertificated irregular and supplemental air carriers.

Air cargo carriers, noncertificated
Air operators, "fixed-base": noncertificated
Air passenger carriers, noncertificated
Air taxis, noncertificated

Air transportation by noncertificated carriers
Flying charter service
Sightseeing airplane service

458 FIXED FACILITIES AND SERVICES RELATED TO AIR TRANSPORTATION**4582 Airports and Flying Fields**

Establishments primarily engaged in the operation and maintenance of airports and flying fields and/or the servicing, repairing (except on a factory basis), and storing of aircraft at such airports. Aircraft modification centers and establishments primarily engaged in factory type overhaul of aircraft are classified in Major Group 37, and flying fields maintained by aviation clubs in Industry 7997.

Aircraft cleaning and janitorial service
Aircraft servicing and repairing, except on a factory basis
Aircraft storage at airports
Aircraft upholstery repair
Airport hangar rental

Airport leasing, if operating airport
Airports
Flying fields, except those maintained by aviation clubs
Hangar operation

4583 Airport Terminal Services

Establishments primarily engaged in furnishing coordinated handling services for air freight or passengers at airports. Establishments furnishing aircraft services directly associated with aircraft repair, maintenance, and storage, either exclusively or in conjunction with other terminal airport services, are classified in Industry 4582. Aircraft modification centers and establishments primarily engaged in factory type overhaul of aircraft are classified in Major Group 37.

Air freight handling at airports

Airport terminal services

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STANDARD INDUSTRIAL CLASSIFICATION

Major Group 46.—PIPE LINES, EXCEPT NATURAL GAS*The Major Group as a Whole*

This major group includes establishments primarily engaged in the pipe line transportation of petroleum and other commodities, except natural gas (Industry 4922). Pipe lines operated by petroleum producing or refining companies and separately reported are included.

Group Industry
No. No.

461 PIPE LINES, EXCEPT NATURAL GAS**4612 Crude Petroleum Pipe Lines**

Establishments primarily engaged in the pipe line transportation of crude petroleum. Field gathering lines are classified in Major Group 13.

Crude petroleum pipe lines

4613 Refined Petroleum Pipe Lines

Establishments primarily engaged in the pipe line transportation of refined products of petroleum, such as gasoline and fuel oil.

Gasoline pipe lines (common carriers)

Refined petroleum pipe lines

4619 Pipe Lines, Not Elsewhere Classified

Establishments primarily engaged in the pipe line transportation of commodities, except crude petroleum (Industry 4612), refined products of petroleum (Industry 4613), and natural gas (Industry 4922).

Coal pipe line operation
Pipe line operation, except petroleum
and natural gas pipe lines

Slurry pipe line operation

TRANSPORTATION AND PUBLIC UTILITIES

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Major Group 47.—TRANSPORTATION SERVICES*The Major Group as a Whole*

This major group includes establishments furnishing services incidental to transportation, such as forwarding and packing services, and the arrangement of passenger and freight transportation.

Group Industry
No. No.

471 | FREIGHT FORWARDING**4712 Freight Forwarding**

Establishments primarily engaged in undertaking the transportation of goods from shippers to receivers for a charge covering the entire transportation, and in turn making use of the services of other transportation establishments as instrumentalities in effecting delivery. A forwarding establishment pays transportation charges to other establishments as part of its costs of doing business and assumes responsibility for delivery of the goods. There are no direct relations between shippers and the transportation establishments performing the movement. Foreign freight forwarders assume responsibility for air transportation but not for ocean transportation of the freight. The RMA Express is classified in Industry 4041; and establishments which merely arrange for dealings between shippers and transportation establishments are classified in Industry 4728.

Customs clearance of freight
Domestic forwarding
Foreign forwarding

Freight consolidation
Freight forwarding
Shipping documents preparation

472

ARRANGEMENT OF TRANSPORTATION**4722 Arrangement of Passenger Transportation**

Establishments primarily engaged in furnishing travel information, acting as agents in arranging tours and transportation for passengers or acting as independent ticket agencies for transportation establishments.

Airline ticket offices, not operated by transportation companies
Bus ticket offices, not operated by transportation companies
Railroad ticket offices, not operated by transportation companies
Steamship ticket offices, not operated by transportation companies

Tourist agencies for the arrangement of transportation
Tours, conducted: except sightseeing buses, boats, and airplanes
Travel agencies and bureaus not operated by transportation companies

4723 Arrangement of Transportation of Freight and Cargo

Establishments primarily engaged in furnishing shipping information and acting as agents in arranging transportation for freight and cargo. Establishments operating as domestic or foreign freight forwarders are classified in Industry 4712. When separate reports are available for marine cargo handling operations performed by transportation arranging establishments, the cargo handling is classified in Industry 4468. When separate reports are not available, the cargo handling operations are classified with the arrangement of transportation in this industry.

Agents, shipping
Brokers, shipping
Brokers, transportation
Customhouse brokers
Freight agencies, railroad: not operated by railroad companies

Freight rate information service
Transport clearinghouse
Transportation rate services
Truck transportation brokers

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

474 RENTAL OF RAILROAD CARS

4742 Rental of Railroad Cars With Care of Lading

Establishments primarily engaged in renting railroad cars and/or performing services connected with the use thereof. The Fruit Growers Express Company is an example.

Grain leveling in railroad cars
Grain trimming service, for railroad shipment
Precooling of fruits and vegetables in connection with transportation

Railroad car cleaning, icing, ventilating, and heating
Railroad car rental, with care of lading

4743 Rental of Railroad Cars Without Care of Lading

Establishments primarily engaged in renting railroad cars without furnishing any services connected with the use thereof. This group does not include insurance, banking, or other financial institutions which purchase and lease railroad cars as investments.

Rental of railroad cars, without care of lading

478 MISCELLANEOUS SERVICES INCIDENTAL TO TRANSPORTATION

4782 Inspection and Weighing Services Connected With Transportation

Establishments primarily engaged in inspecting and weighing goods in connection with their transportation.

Cargo checkers and surveyors, marine inspection services connected with transportation

Weighing services connected with transportation

4783 Packing and Crating

Establishments primarily engaged in packing, crating, and otherwise preparing goods for shipping. Establishments primarily engaged in packaging and labeling merchandise for purposes other than shipping (retail packaging) are classified in Industry 7800.

Crating goods for shipping

Packing goods for shipping

4784 Fixed Facilities for Handling Motor Vehicle Transportation, Not Elsewhere Classified

Establishments primarily engaged in the operation of fixed facilities for motor vehicle transportation, such as toll roads, highway bridges, and other fixed facilities, except terminals.

Highway bridges, operation of
Toll bridge operation

Toll roads, operation of
Tunnel operation, vehicular

4789 Services Incidental to Transportation, Not Elsewhere Classified

Establishments primarily engaged in furnishing services incidental to transportation, not elsewhere classified. Included are: (1) stockyards that do not buy, sell, or auction livestock, and (2) sleeping and dining car operations not performed by railroads.

Cabs, horse drawn: for hire
Car loading
Carriages, horse drawn: for hire
Cleaning railroad ballast
Dining car services, not performed by line-haul railroad companies
Freight car loading and unloading (not truckers)

Parlor car services, not performed by line-haul railroad companies
Pipe line terminal facilities independently operated
Sleeping car and other passenger car services, not performed by railroads
Stockyards, not primarily for fattening or selling livestock

TRANSPORTATION AND PUBLIC UTILITIES

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Major Group 48.—COMMUNICATION*The Major Group as a Whole*

This major group includes establishments furnishing point-to-point communication services, whether by wire or radio, and whether intended to be received aurally or visually; and radio and television broadcasting. Services for the exchange or recording of messages are also included.

Group Industry
No. No.

481 TELEPHONE COMMUNICATION (WIRE OR RADIO)**4811 Telephone Communication (Wire or Radio)**

Establishments primarily engaged in furnishing telephone communication service by placing the parties in vocal conversation with each other. This industry includes domestic, international, marine, mobile, and aeronautical services. Establishments primarily engaged in providing paging and telephone answering services are classified in Major Group 78.

Telephone cable service, land or sub-marine

Telephone, wire or radio

482 TELEGRAPH COMMUNICATION (WIRE OR RADIO)**4821 Telegraph Communication (Wire or Radio)**

Establishments primarily engaged in furnishing telegraphic communication service by transmitting nonvocal record communications intended for receipt by designated persons. This industry includes domestic, international, marine, and aeronautical services.

Radio telegraph
Telegraph cable service, land or sub-marine

Telegraph, wire and radio

483 RADIO AND TELEVISION BROADCASTING**4832 Radio Broadcasting**

Stations primarily engaged in activities involving the dissemination by radio to the public of aural programs (consisting of voice and music and the like). Stations engaged in the sale of time for broadcast purposes, and the furnishing of program material or service, are also included. Establishments primarily engaged in the transmission by radio, in public correspondence from point to point, of voice or record communications are classified in Industries 4811 or 4821.

Radio broadcasting stations

4833 Television Broadcasting

Stations primarily engaged in activities involving the dissemination by radio to the public of visual programs, consisting of moving or still objects, usually accompanied by an aural signal (consisting of voice and music or the like). Stations engaged in the sale of time for broadcast purposes, and the furnishing of program material or service, are also included.

Subscription or closed circuit television
Television broadcasting stations

Television translator stations

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

439 COMMUNICATION SERVICES, NOT ELSEWHERE CLASSIFIED

4399 Communication Services, Not Elsewhere Classified

Establishments primarily engaged in providing point-to-point communication services which do not fall within the scope of either Industry 4811 or 4821.

Cablevision service, rental to homes
Communication services, except tele-
phone, videophone, telegraph, radio,
TV
Missile tracking stations, operated on
a contract basis
Phototransmission services
Radar station operation
Radio broadcasting operated by cab
companies
Stock ticker service

Telecommunication, except telephone,
telegraph, radio, videophone, and TV
Telephoto service, leasing
Teletypewriter service, leasing
Television antenna construction and
rental to private households
Ticker tape service, leasing
Tracking missiles by telemetry and
photography on a contract basis
Transradio press service

TRANSPORTATION AND PUBLIC UTILITIES

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Major Group 49.—ELECTRIC, GAS, AND SANITARY SERVICES*The Major Group as a Whole*

This major group includes establishments engaged in the generation, transmission and/or distribution of electricity or gas or steam. Such establishments may be combinations of any of the above three services and also include other types of service such as transportation, communication, and refrigeration. Water and irrigation systems, and sanitary systems engaged in the collection and disposal of garbage, sewage, and other wastes by means of destroying or processing materials, are also included. Establishments engaged in such operations as manufacturing ice and retail sale of appliances are classified elsewhere. If one service of a combination system does not constitute 95 percent or more of revenues, the establishment should be classified as a combination in Group 493, with the subgroup being determined by the major service supplied.

Group Industry
No. No.

491 ELECTRIC SERVICES**4911 Electric Services**

Establishments engaged in the generation, transmission and/or distribution of electric energy for sale.

Electric power generation, transmission, or distribution

492 GAS PRODUCTION AND DISTRIBUTION**4922 Natural Gas Transmission**

Establishments engaged in the transmission and/or storage of natural gas for sale.

Natural gas storage
Natural gas transmission

Pipe lines, natural gas

4923 Natural Gas Transmission and Distribution

Establishments engaged in both the transmission and distribution of natural gas for sale.

Natural gas transmission and distribution

4924 Natural Gas Distribution

Establishments engaged in the distribution of natural gas for sale.

Natural gas distribution

4925 Mixed, Manufactured or Liquefied Petroleum Gas Production and/or Distribution

Establishments engaged in the manufacture and/or distribution of gas for sale, including mixtures of manufactured with natural gas. Establishments distributing liquefied petroleum (LP) gas in steel containers are classified in Industry 5984.

Blue gas, carbureted: production and distribution
Coke oven gas, production and distribution
Coke ovens, byproduct: operated for manufacture or distribution of gas

Gas, mixed natural and manufactured: production and distribution
Liquefied petroleum (LP) gas, distribution through mains
Manufactured gas production and distribution

493 COMBINATION ELECTRIC AND GAS, AND OTHER UTILITY SERVICES

Establishments providing electric or gas services in combination with other services. Establishments are classified here only if one service does not constitute 95 percent or more of revenues.

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

493 COMBINATION ELECTRIC AND GAS, AND OTHER UTILITY SERVICES—Con.

4931 Electric and Other Services Combined

Establishments primarily engaged in providing electric services in combination with other services, with electric services as the major part though less than 95 percent of the total.

Electric and other services combined
(electric less than 95 percent of total)

4932 Gas and Other Services Combined

Establishments primarily engaged in providing gas services in combination with other services, with gas services as the major part though less than 95 percent of the total.

Gas and other services combined (gas
less than 95 percent of total)

4939 Combination Utilities, Not Elsewhere Classified

494 WATER SUPPLY

4941 Water Supply

Establishments primarily engaged in distributing water for sale for domestic, commercial, and industrial use. Systems distributing water primarily for irrigation service are classified in Industry 4971.

Water supply systems, except irrigation

495 SANITARY SERVICES

4952 Sewerage Systems

Establishments primarily engaged in the collection and disposal of wastes conducted through a sewer system, including such treatment processes as may be provided.

Sewerage systems

4953 Refuse Systems

Establishments primarily engaged in the collection and disposal of refuse by processing or destruction. Establishments primarily engaged in collecting and transporting refuse without disposal are classified in Industry 4212.

Acid waste, collection and disposal
Ashes, collection and disposal of
Dead animal disposal
Dumps, operation of
Garbage: collecting, destroying, and
processing

Incinerator operation
Radioactive waste materials, disposal
Refuse systems
Rubbish collection and disposal
Street refuse systems
Waste materials, disposal at sea

4959 Sanitary Services, Not Elsewhere Classified

Establishments primarily engaged in furnishing sanitary services, not elsewhere classified.

Malaria control
Mosquito eradication
Snowplowing

Sweeping service: road, airport, parking lot, etc.
Vacuuming of airport runways

496 STEAM SUPPLY

4961 Steam Supply

Establishments engaged in the production and/or distribution of steam and heated or cooled air for sale.

Cooled air suppliers
Distribution of cooled air
Steam heating systems (suppliers of heat)

Steam supply systems, including geothermal

TRANSPORTATION AND PUBLIC UTILITIES

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Group No.	Industry No.
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497

IRRIGATION SYSTEMS**4971 Irrigation Systems**

Establishments primarily engaged in operating water supply systems for the purpose of irrigation.

Impounding reservoirs, irrigation
irrigation system operation

Water distribution or supply systems
for irrigation

Division F

Wholesale Trade

The Division as a Whole

This division includes establishments or places of business primarily engaged in selling merchandise to retailers; to industrial, commercial, institutional, farm, or professional business users; or to other wholesalers; or acting as agents or brokers in buying merchandise for or selling merchandise to such persons or companies.

The principal types of establishments included are: (1) merchant wholesalers—wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, voluntary group wholesalers, exporters, importers, cash-and-carry wholesalers, drop shippers, wagon distributors, retailer cooperative warehouses, terminal elevators, and cooperative buying associations; (2) sales branches and sales offices (but not retail stores) maintained by manufacturing or mining enterprises apart from their plants or mines for the purpose of marketing their products; (3) agents, merchandise or commodity brokers, and commission merchants; (4) petroleum bulk stations; and (5) assemblers, buyers, and associations engaged in the cooperative marketing of farm products. Establishments primarily engaged in the wholesale distribution of used products are classified on the basis of the products sold.

Establishments primarily engaged in selling merchandise to contractors are included in Wholesale Trade, with the exception of lumber yards and paint, glass, and wallpaper stores. These exceptions are classified in Retail Trade if they sell to the general public, even if a higher proportion of their sales is made to contractors.

The chief functions of establishments included in Wholesale Trade are selling goods to trading establishments, or to industrial, commercial, institutional, farm, and professional business users; and bringing buyer and seller together. In addition to selling, functions frequently performed by wholesale establishments include maintaining inventories of goods; extending credit; physically assembling, sorting, and grading goods in large lots; breaking bulk and redistribution in smaller lots; delivery; refrigeration; and various types of promotion such as advertising and label designing.

Procedures for the classification of establishments primarily engaged in the wholesale distribution and construction or installation of equipment manufactured by other establishments of the same company are outlined in the Introduction to Division C—Construction.

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STANDARD INDUSTRIAL CLASSIFICATION

Major Group 50.—WHOLESALE TRADE—DURABLE GOODS

The major group includes establishments primarily engaged in the wholesale distribution of durable goods.

Group Industry
No. No.

501 MOTOR VEHICLES AND AUTOMOTIVE PARTS AND SUPPLIES**5012 Automobiles and Other Motor Vehicles**

Establishments primarily engaged in the wholesale distribution of new and used passenger automobiles, trucks, and other motor vehicles. Automotive distributors primarily engaged in selling at retail to individual consumers for personal use, and also selling a limited amount of new and used passenger automobiles and trucks at wholesale to dealers, are classified in Retail Trade, Industry 5511.

Automobile auctions—wholesale
Automobiles—wholesale
Bodies, truck—wholesale
Buses—wholesale
Campers (pickup coaches) for mounting on trucks—wholesale
Motor scooters—wholesale
Motor vehicles, commercial—wholesale

Motorcycles—wholesale
Pop-up campers—wholesale
Taxicabs—wholesale
Trailers for passenger automobiles—wholesale
Truck tractors—wholesale
Truck trailers—wholesale
Trucks—wholesale

5013 Automotive Parts and Supplies

Establishments primarily engaged in the wholesale distribution of automotive parts, supplies, accessories, tools and equipment.

Automobile engine testing equipment, electrical—wholesale
Automobile glass, wholesale
Automotive accessories—wholesale
Automotive parts, new and used—wholesale
Automotive supplies—wholesale
Batteries, automotive—wholesale

Hardware, automotive—wholesale
Seat belts, automotive—wholesale
Seat covers, automotive—wholesale
Testing equipment, electrical: automotive—wholesale
Tools and equipment, automotive—wholesale
Wheels, motor vehicle—wholesale

5014 Tires and Tubes

Establishments primarily engaged in the wholesale distribution of rubber tires and tubes for passenger and commercial vehicles.

Motor vehicle tires and tubes—wholesale
Repair materials, tire and tube—wholesale

Tires and tubes—wholesale
Tires, used—wholesale

502 FURNITURE AND HOME FURNISHINGS**5021 Furniture**

Establishments primarily engaged in the wholesale distribution of furniture, including bedsprings, mattresses, and other household furniture; office furniture; and furniture for public parks, buildings, etc.

Bedsprings—wholesale
Chairs: household, office, and public building—wholesale
Furniture: household, office, restaurant, public buildings—wholesale

Furniture, juvenile—wholesale
Mattresses—wholesale

WHOLESALE TRADE

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Group Industry
No. No.

502 FURNITURE AND HOME FURNISHINGS—Continued

5023 Home Furnishings

Establishments primarily engaged in the wholesale distribution of home furnishings and homewares, including antiques; china; glassware and earthenware; lamps; curtains and draperies; linens and towels; carpets, linoleum, and all other types of hard and soft surface floor coverings. Establishments primarily engaged in the wholesale distribution of electrical household goods are classified in Industry 5064.

Aluminumware—wholesale
Bedspreads—wholesale
Blankets—wholesale
Carpets—wholesale
China—wholesale
Crocery—wholesale
Curtains—wholesale
Draperies—wholesale
Floor coverings—wholesale
Glassware—wholesale

Home furnishings—wholesale
Kitchen tools and utensils—wholesale
Lamps: floor, boudoir, desk—wholesale
Linens—wholesale
Linoleum—wholesale
Pillowcases—wholesale
Rugs—wholesale
Sheets, textile—wholesale
Slip covers (furniture)—wholesale
Table linens—wholesale

503

LUMBER AND OTHER CONSTRUCTION MATERIALS

5031 Lumber, Plywood and Millwork

Establishments, with or without yards, primarily engaged in the wholesale distribution of rough, dressed, and finished lumber (but not timber); plywood; door and window frames (wood or metal); and other wood and metal millwork. Establishments selling lumber, plywood and millwork to the general public and known as "retail" in the trade are classified in Industry 5211.

Door frames, sheet metal—wholesale
Lumber: rough, dressed, and finished—
wholesale
Millwork—wholesale
Molding, sheet metal—wholesale
Plywood—wholesale
Shingles, wood—wholesale

Structural assemblies, prefabricated:
wood—wholesale
Veneer—wholesale
Wallboard—wholesale
Window frames, sheet metal—whole-
sale

5039 Construction Materials, Not Elsewhere Classified

Establishments primarily engaged in the wholesale distribution of such building materials as brick, building stone, cement, granite, gravel, lime, marble, plaster, building glass, roofing materials, sand, and tile. Establishments selling construction materials to the general public and known as "retail" in the trade are classified in Industry 5211. Establishments primarily engaged in marketing heavy structural metal products are classified in Industry 5051. Establishments primarily selling readymade concrete are classified in manufacturing.

Aggregate—wholesale
Awnings—wholesale
Blocks, building—wholesale
Brick—wholesale
Building stone—wholesale
Cement—wholesale
Cinders—wholesale
Concrete building products—wholesale
Felts, tarred—wholesale
Fence and accessories, wire—wholesale
Fiberglass building materials—whole-
sale
Flue linings—wholesale
Glass, flat—wholesale
Granite building stone—wholesale
Gravel—wholesale
Insulation, thermal: rigid and non-
rigid—wholesale
Lime, except agricultural—wholesale
Marble building stone—wholesale

Masons' materials—wholesale
Plaster—wholesale
Plate glass—wholesale
Prefabricated buildings—wholesale
Roofing, asphalt and sheet metal—
wholesale
Sand—wholesale
Sewer pipe, clay—wholesale
Shingles, asbestos cement—wholesale
Shingles, asphalt—wholesale
Siding, sheet metal—wholesale
Stone, building—wholesale
Stone, crushed—wholesale
Structural assemblies, prefabricated:
nonwood—wholesale
Stucco—wholesale
Terra cotta—wholesale
Tile—wholesale
Window glass—wholesale

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STANDARD INDUSTRIAL CLASSIFICATION

Group No. Industry No.

504 SPORTING, RECREATIONAL, PHOTOGRAPHIC, AND HOBBY GOODS, TOYS AND SUPPLIES

5041 Sporting and Recreational Goods and Supplies

Establishments primarily engaged in the wholesale distribution of all types of sporting goods and accessories, billiard and pool supplies; firearms and ammunition; and marine pleasure craft, equipment and supplies.

Ammunition—wholesale
Athletic goods—wholesale
Bait (live, dead or artificial)—whole-
sale
Bicycle tires and tubes—wholesale
Bicycles—wholesale

Boats, including canoes, motorboats
and sailboats—wholesale
Firearms—wholesale
Gocarts—wholesale
Outboard motors—wholesale

5042 Toys and Hobby Goods and Supplies

Establishments primarily engaged in the wholesale distribution of games, toys, and hobby goods and supplies.

Amusement goods—wholesale
Fireworks—wholesale
Games—wholesale

Toys—wholesale
Vehicles, children's—wholesale

5043 Photographic Equipment and Supplies

Establishments primarily engaged in the wholesale distribution of photographic equipment and supplies. Establishments primarily engaged in the wholesale distribution of photocopy equipment are classified in Industry 5081.

Cameras, equipment, and supplies—
wholesale
Darkroom apparatus—wholesale
Developing apparatus, photographic—
wholesale
Identity recorders for photographing
checks and fingerprints—wholesale
Motion picture cameras, equipment,
and supplies—wholesale

Motion picture studio and theater
equipment—wholesale
Photographic cameras, projectors,
equipment and supplies—wholesale
Printing apparatus, photographic—
wholesale
Projection apparatus, motion picture
and slide: photographic—wholesale

505 METALS AND MINERALS, EXCEPT PETROLEUM

5051 Metals Service Centers and Offices

Establishments primarily engaged in marketing ferrous and nonferrous metal semi-finished products. Establishments in this industry may operate with warehouses (metals service centers) or without warehouses (metals sales offices).

Aluminum bars, rods, ingots, sheets,
pipes, plates, etc.—wholesale
Anode metal—wholesale
Bale ties, wire—wholesale
Bars, metal—wholesale
Bearing piles, iron and steel—wholesale
Black plate, iron and steel—wholesale
Castings, rough: iron and steel—
wholesale
Concrete reinforcing bars—wholesale
Copper sheets, plates, bars, rods, pipes,
etc.—wholesale
Ferroalloys—wholesale
Forgings, ferrous—wholesale
Forms, concrete construction (steel)—
wholesale
Foundry products—wholesale
Ingots—wholesale
Iron and steel flat products—wholesale
Iron and steel semifinished products—
wholesale
Lead—wholesale
Mercury—wholesale
Nails—wholesale
Nonferrous metal (except precious)
sheets, bars, rods, etc.—wholesale
Pig iron—wholesale

Piling, iron and steel—wholesale
Pipe and tubing, steel—wholesale
Pipe, cast iron—wholesale
Plates, metal—wholesale
Rails and accessories—wholesale
Reinforcement mesh, wire—wholesale
Rods, metal—wholesale
Sheets, galvanized or other coated—
wholesale
Sheets, metal—wholesale
Steel—wholesale
Strip, metal—wholesale
Structural shapes, iron and steel—
wholesale
Terneplate—wholesale
Tin and tin base metals, shapes,
forms, etc.—wholesale
Tin plate bars—wholesale
Tin plate—wholesale
Track spikes—wholesale
Tubing, metal—wholesale
Wire rods—wholesale
Wire rope or cable, not insulated—
wholesale
Wire screening—wholesale
Wire, not insulated—wholesale
Zinc—wholesale

WHOLESALE TRADE

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Group Industry
No. No.
505

METALS AND MINERALS, EXCEPT PETROLEUM—Continued**5052 Coal and Other Minerals and Ores**

Establishments primarily engaged in the wholesale distribution of coal and coke; copper, iron, lead, and other metallic ores except precious; and crude nonmetallic minerals (including concentrates) except crude petroleum. Establishments primarily engaged in the wholesale distribution of nonmetallic minerals used in construction, such as sand and gravel, are included in Industry 5089.

Coal—wholesale
Coke—wholesale
Copper ore—wholesale
Iron ore—wholesale
Lead ore—wholesale
Metallic concentrates—wholesale

Metallic ores, except precious—wholesale
Nonmetallic minerals except petroleum, crude—wholesale
Zinc ore—wholesale

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ELECTRICAL GOODS

This group includes establishments primarily engaged in the wholesale distribution of electrical generating, distributing, and wiring equipment. It also includes household appliances whether electrically, manually, or mechanically powered, such as washing machines powered by gasoline motors and sewing machines powered manually. This group does not include electrical commercial and industrial machines (i.e., those in which electricity does the work directly, such as heating, turning a shaft, or ionizing a substance), or electrically powered commercial and industrial machines which are classified in Group 508.

5063 Electrical Apparatus and Equipment, Wiring Supplies and Construction Materials

Establishments primarily engaged in the wholesale distribution of electrical power equipment for the generation, transmission, or utilization of electric energy; and electrical construction materials for outside power transmission lines and for electrical systems. Construction contractors primarily engaged in installing electrical systems and equipment from their own stock are classified in Industry 1781.

Alarm signal systems—wholesale
Boxes and fittings, electrical—wholesale
Bus bars and trolley ducts—wholesale
Cable conduit—wholesale
Circuit breakers—wholesale
Communication equipment—wholesale
Conduits and raceways—wholesale
Construction materials, electrical: interior and exterior—wholesale
Distribution equipment, electrical—wholesale
Fuses and accessories—wholesale
Generators, electrical—wholesale
Hanging and fastening devices, electrical—wholesale
Insulators, electrical—wholesale
Lamp bulbs and similar electrical supplies—wholesale
Light bulbs, electric—wholesale
Lighting fixtures: residential, commercial, and industrial—wholesale
Lugs and connectors, electrical—wholesale

Measuring and testing equipment, electrical except automotive—wholesale
Motor controls, electric—wholesale
Motors, electric—wholesale
Panelboards—wholesale
Pole line hardware—wholesale
Power transmission equipment, electrical—wholesale
Receptacles, electrical—wholesale
Safety switches—wholesale
Service entrance equipment, electrical—wholesale
Signaling equipment, electrical—wholesale
Storage batteries, industrial—wholesale
Switchboards—wholesale
Time switches—wholesale
Transformers, electric—wholesale
Transmission equipment, electrical—wholesale
Unit substations—wholesale
Wiring devices—wholesale
Wiring materials, interior—wholesale
Wiring supplies—wholesale

5064 Electrical Appliances, Television and Radio Sets

Establishments primarily engaged in the wholesale distribution of radio and television sets and household electrical appliances.

Air-conditioning room units, self-contained—wholesale
Clothes driers, household: electric or gas—wholesale
Dishwashers, household: electric—wholesale
Electric appliances, household—wholesale

Electric irons—wholesale
Electric ranges—wholesale
Electric razors—wholesale
Electric washing machines—wholesale
Freezers, household—wholesale
Garbage disposers, electric—wholesale
Ironers, household: electric—wholesale
Motor vehicle radios—wholesale

STANDARD INDUSTRIAL CLASSIFICATION

Group No.	Industry No.
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ELECTRICAL GOODS—Continued

5084 Electrical Appliances, Television and Radio Sets—Continued

Percolators, electric—wholesale
Phonographs—wholesale
Radios—wholesale
Refrigerators, household: electric and
gas—wholesale
Sewing machines, household: electric—
wholesale
Stoves, cooking or heating, household:
electric—wholesale

Television sets—wholesale
Toothbrushes, electric—wholesale
Vacuum cleaners, household—wholesale
Waffle irons, electric—wholesale
Washing machines, household: electric—wholesale
Water heaters, electric—wholesale

5065 Electronic Parts and Equipment

Establishments primarily engaged in the wholesale distribution of electronic parts and equipment, such as industrial and radio and television receiving and transmitting electronic tubes; electronic intercommunication equipment; radio parts and accessories; and electronic sound equipment. Establishments primarily engaged in the wholesale distribution of radio and television receiving sets and phonographs are classified in Industry 5064.

Electronic parts—wholesale
Electronic tubes: receiving and trans-
mitting, and industrial—wholesale
Hearing aids—wholesale
Intercommunication equipment, elec-
tronic—wholesale

Public address equipment—wholesale
Radio parts and accessories—wholesale
Sound equipment, electronic: except
household—wholesale
Television receiving and transmitting
tubes—wholesale

507

HARDWARE, AND PLUMBING AND HEATING EQUIPMENT AND SUPPLIES

5072 Hardware

Establishments primarily engaged in the wholesale distribution of hardware, such as builders; shelf or light hardware; hand tools (except automotive and machinists' precision); hand saws and cutlery; brads, staples, and tacks; and bolts, nuts, rivets and screws. Establishments primarily engaged in the wholesale distribution of nails, noninsulated wire, and screening are classified in Industry 5061.

Bolts, nuts, rivets, and screws—whole-sale
Brads—wholesale
Builders' hardware—wholesale
Cutlery—wholesale
Hand saws—wholesale

Hardware, heavy—wholesale
Hardware, shelf or light—wholesale
Staples—wholesale
Tacks—wholesale
Tools, hand: except automotive and
machinists' precision—wholesale

5074 Plumbing and Heating Equipment and Supplies (Hydronics)

Establishments primarily engaged in the wholesale distribution of hydronic plumbing and heating equipment and supplies. Construction contractors primarily engaged in installing plumbing and heating equipment from their own stock are classified in Industry 1711.

Boilers, power (industrial)—wholesale
Boilers, steam and hot water heating—
wholesale
Burners: fuel oil and distillate oil—
wholesale
Convectors—wholesale
Furnaces, except electric and warm
air—wholesale
Hydronic heating equipment and sup-
plies—wholesale
Oil burners—wholesale
Pipe and boiler covering—wholesale
Plumbers' brass goods, fittings, and
valves—wholesale
Plumbing fixtures, equipment, and sup-
plies—wholesale

**Radiators and parts, heating—whole-
sale**
Ranges, except electric—wholesale
**Sanitary ware, china or enameled
iron—wholesale**
**Sauna heaters, except electric—whole-
sale**
Sewer fittings—wholesale
**Stoves, cooking: except electric—
wholesale**
**Water conditioning equipment—whole-
sale**
**Water heaters, except electric—whole-
sale**

WHOLESALE TRADE

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Group Industry
No. No.

**507 HARDWARE, AND PLUMBING AND HEATING EQUIPMENT AND SUPPLIES—
Continued**

5075 Warm Air Heating and Air Conditioning Equipment and Supplies

Establishments primarily engaged in the distribution of warm air heating and air conditioning equipment and supplies. Construction contractors primarily engaged in installing warm air heating and air conditioning equipment are classified in Industry 1711.

Air conditioning equipment, except
room units—wholesale
Compressors, air conditioning—whole-
sale
Condensing units, air conditioning—
wholesale

Dust collecting equipment—wholesale
Furnaces, warm air—wholesale
Ventilating equipment and supplies—
wholesale

5078 Refrigeration Equipment and Supplies

Establishments primarily engaged in the distribution of refrigeration equipment and supplies. Construction contractors primarily engaged in installing refrigeration equipment from their own stock are classified in Industry 1711.

Beverage coolers—wholesale
Cold storage machinery—wholesale
Display cases, refrigerated—wholesale
Drinking water coolers, mechanical—
wholesale

Ice cream cabinets—wholesale
Ice making machines—wholesale
Refrigerators, commercial: reach-in
and walk-in—wholesale

508 MACHINERY, EQUIPMENT, AND SUPPLIES

5081 Commercial Machines and Equipment

Establishments primarily engaged in wholesaling commercial machines and equipment, such as office, store and business machines and equipment; commercial food service equipment; and fountain and store fixtures.

Accounting machines—wholesale
Adding machines—wholesale
Addressing machines—wholesale
Balances, except laboratory—wholesale
Business machines and equipment—
wholesale
Cash registers—wholesale
Coffee urns, commercial—wholesale
Coin-operated phonographs and vend-
ing machines—wholesale
Computers and peripheral equipment—
wholesale
Cooking equipment, commercial—
wholesale
Display equipment, except refriger-
ated—wholesale
Duplicating machines—wholesale
Food warming equipment, commer-
cial—wholesale
Hotel equipment (except furniture)
and supplies—wholesale

Magnetic recording tape—wholesale
Mailing machines—wholesale
Mannequins—wholesale
Neon signs—wholesale
Office machines and equipment, except
furniture—wholesale
Photocopy machines—wholesale
Recording tape, magnetic—wholesale
Restaurant equipment (except furni-
ture)—wholesale
Scales, except laboratory—wholesale
Soda fountain fixtures—wholesale
Statistical machines—wholesale
Store equipment, except furniture—
wholesale
Store fixtures—wholesale
Store machines—wholesale
Teaching machines, electronic—whole-
sale
Typewriters—wholesale
Vaults and safes—wholesale

5083 Construction and Mining Machinery and Equipment

Establishments primarily engaged in marketing cranes, excavating machinery and equipment, power shovels, road construction and maintenance machinery, tractor-mounting equipment and other specialized machinery and equipment used in the construction, mining and logging industries. Establishments engaged in marketing oil well machinery and equipment are classified in Industry 5084.

Bituminous processing equipment—
wholesale
Concrete processing equipment—whole-
sale
Construction machinery and equip-
ment—wholesale
Excavating machinery and equipment—
wholesale
Graders, motor—wholesale
Mining machinery and equipment—
wholesale

Quarrying machinery and equipment—
wholesale
Road construction and maintenance
machinery—wholesale
Scaffolding—wholesale
Shovels, power—wholesale
Tractor mounted equipment—wholesale
Well points (drilling equipment)—
wholesale

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

508

MACHINERY, EQUIPMENT, AND SUPPLIES—Continued

5083 Farm and Garden Machinery and Equipment

Establishments primarily engaged in marketing agricultural machinery and equipment for use in the preparation and maintenance of the soil, the planting and harvesting of crops, and other operations and processes pertaining to work on the farm or the lawn or garden; and dairy and other livestock equipment.

Agricultural machinery—wholesale
Cream separators, farm—wholesale
Cultivating machinery and equipment—wholesale
Dairy farm machinery and equipment—wholesale
Farm machinery and equipment—wholesale
Garden machinery and equipment—wholesale
Harvesting machinery and equipment—wholesale
Haying machinery—wholesale

Irrigation equipment—wholesale
Land preparation machinery, agricultural—wholesale
Milking machinery and equipment—wholesale
Mowers, power—wholesale
Planting machinery and equipment—wholesale
Poultry equipment—wholesale
Poultry raising equipment—wholesale
Tractors, agricultural—wholesale
Wind machines (frost protection equipment)—wholesale

5084 Industrial Machinery and Equipment

Establishments primarily engaged in marketing industrial machinery and equipment, such as metal working tools, food industries machinery, oil well and oil refining machinery, industrial trucks and tractors (except over-the-road types), printing machinery, and machinery and equipment for other manufacturing industries.

Cement making machinery—wholesale
Chainsaws—wholesale
Citrus processing machinery—wholesale
Compressors, except air conditioning—wholesale
Controlling instruments and accessories—wholesale
Conveyor systems—wholesale
Cranes, industrial—wholesale
Cream separators, except farm—wholesale
Crushing machinery and equipment—wholesale
Dairy products manufacturing machinery—wholesale
Derricks—wholesale
Diesel engines and parts—wholesale
Drilling bits—wholesale
Elevators, including repair—wholesale
Fans, industrial—wholesale
Food product manufacturing machinery—wholesale
Heat exchange equipment, industrial—wholesale
Hoists—wholesale
Indicating instruments and accessories—wholesale
Ladders—wholesale
Lift trucks—wholesale
Machine tool accessories—wholesale
Machine tools—wholesale
Machinists' precision tools—wholesale
Materials handling equipment—wholesale
Metal refining machinery and equipment—wholesale
Metalworking machinery—wholesale
Metalworking tools: drills, taps, dies, grinding wheels, files—wholesale
Milk products manufacturing machinery and equipment—wholesale
Oil refining machinery, equipment, and supplies—wholesale

Oil well machinery, equipment, and supplies—wholesale
Oil well supply houses—wholesale
Paint spray equipment, industrial—wholesale
Paper manufacturing machinery—wholesale
Power plant machinery, except electrical—wholesale
Printing trades machinery, equipment, and supplies—wholesale
Pulp (wood) manufacturing machinery—wholesale
Pulverizing machinery and equipment—wholesale
Pumps and pumping equipment—wholesale
Rebuilding and sale of oil field tool joints—wholesale
Recapping machinery, for tires—wholesale
Recording instruments and accessories—wholesale
Screening machinery and equipment—wholesale
Sewing machines, industrial—wholesale
Shoe manufacturing and repairing machinery—wholesale
Smelting machinery and equipment—wholesale
Stackers, industrial—wholesale
Tapping attachments—wholesale
Textile machinery and equipment—wholesale
Tractors, industrial—wholesale
Trailers, industrial—wholesale
Trucks, industrial—wholesale
Water pumps—wholesale
Welding machinery and equipment—wholesale
Winches—wholesale
Woodworking machinery—wholesale

WHOLESALE TRADE

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Group Industry
No. No.

508

MACHINERY, EQUIPMENT, AND SUPPLIES—Continued**5085 Industrial Supplies**

Establishments primarily engaged in marketing industrial supplies, such as abrasives and materials, rope and cordage, and mechanical rubber goods; welding supplies; mechanical power transmission supplies, including bearings; industrial valves and fittings; metal containers; industrial leather; and reconditioned barrels and drums.

Abrasives, wholesale
Barrels, new and reconditioned—wholesale
Bearings—wholesale
Belt—wholesale
Bottlers' supplies: caps, bottles, etc.—wholesale
Bottles, glass or plastic—wholesale
Boxes, crates, etc., other than paper—wholesale
Brushes, industrial—wholesale
Cans for fruits and vegetables—wholesale
Cordage—wholesale
Diamonds, industrial: natural, crude—wholesale
Drums, new and reconditioned—wholesale
Gaskets—wholesale
Glass bottles—wholesale
Grommets—wholesale

Hose, belting, and packing: industrial—wholesale
Industrial fittings—wholesale
Industrial sewing thread—wholesale
Industrial wheels—wholesale
Ink, printer's—wholesale
Lapidary equipment—wholesale
Leather belting, packing—wholesale
Mill supplies—wholesale
Pistons and valves—wholesale
Power transmission equipment, mechanical—wholesale
Refractory material—wholesale
Rope, except wire rope—wholesale
Rubber goods, mechanical—wholesale
Seals, gaskets, and packing—wholesale
Sprockets—wholesale
Textile printers' supplies—wholesale
Twine—wholesale
Valves and fittings, except plumbers'—wholesale

5086 Professional Equipment and Supplies

Establishments primarily engaged in the wholesale distribution of mechanical devices and other equipment used by architects, dentists, engineers, physicians, surgeons, veterinarians, optometrists, osteopaths, and other professional groups.

Architects' equipment and supplies—wholesale
Chairs, dental—wholesale
Dental equipment and supplies—wholesale
Drafting instruments—wholesale
Engineers' equipment and supplies—wholesale
Engines, dental—wholesale
Hospital equipment and supplies, including beds—wholesale
Laboratory equipment—wholesale
Medical equipment and supplies—wholesale
Ophthalmic goods—wholesale
Optical goods, except cameras—wholesale

Optometric equipment and supplies—wholesale
Orthopedic equipment and supplies—wholesale
Physicians' equipment and supplies—wholesale
Professional equipment and supplies—wholesale
Religious supplies—wholesale
School supplies—wholesale
Scientific instruments—wholesale
Surgical equipment and supplies—wholesale
Veterinarians' equipment and supplies—wholesale
X-ray machines and tubes—wholesale

5087 Service Establishment Equipment and Supplies

Establishments primarily engaged in the wholesale distribution of equipment and supplies for barber shops, beauty parlors, power laundries, dry cleaning plants, upholsterers, undertakers, and related personal service establishments.

Barber shop equipment and supplies—wholesale
Beauty parlor equipment and supplies—wholesale
Car wash equipment and supplies—wholesale
Chairs, hydraulic: beauty and barber shop—wholesale
Driers, beauty shop—wholesale
Dry cleaning plant equipment and supplies—wholesale
Findings, shoe repair—wholesale
Fire fighting equipment—wholesale
Janitors' supplies—wholesale
Laundry equipment and supplies—wholesale

Morticians' goods—wholesale
Power laundry equipment and supplies—wholesale
Shoe heels—wholesale
Shoe repair materials—wholesale
Soles, shoe—wholesale
Sprinkler systems—wholesale
Tailors' supplies—wholesale
Undertakers' equipment and supplies—wholesale
Upholsterers' equipment and supplies, except fabrics—wholesale
Vacuum cleaning systems—wholesale
Voting machines—wholesale

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

500 MACHINERY, EQUIPMENT, AND SUPPLIES—Continued

5000 Transportation Equipment and Supplies, Except Motor Vehicles

Establishments primarily engaged in the wholesale distribution of transportation equipment and supplies. Establishments primarily engaged in the wholesale distribution of motor vehicles and motor vehicle parts are classified in Group 501.

Aeronautical equipment and supplies—
wholesale
Aircraft and parts—wholesale
Aircraft equipment and supplies—
wholesale
Boats, except pleasure: wholesale
Marine propulsion machinery and
equipment—wholesale

Marine supplies (dunnage)—wholesale
Railroad equipment and supplies—
wholesale
Transportation equipment and supplies,
except motor vehicles—wholesale

500 MISCELLANEOUS DURABLE GOODS

5000 Scrap and Waste Materials

Establishments primarily engaged in assembling, breaking up, sorting and wholesale distribution of scrap and waste materials. This industry includes auto wreckers engaged in dismantling automobiles for scrap. However, those engaged in dismantling cars for the purpose of selling secondhand parts at retail are classified in Industry 5001.

Automotive wrecking for scrap—
wholesale
Bag reclaiming—wholesale
Bottles, waste—wholesale
Boxes, waste—wholesale
Fur cuttings and scraps—wholesale
Iron and steel scrap—wholesale
Junk and scrap, general line—whole-
sale
Nonferrous metals scrap—wholesale

Oil, waste—wholesale
Rags—wholesale
Reclaiming iron and steel scrap from
slag—wholesale
Rubber scrap—wholesale
Scavenging—wholesale
Textile waste—wholesale
Waste paper—wholesale
Wiping rags, including washing and re-
conditioning—wholesale

5004 Jewelry, Watches, Diamonds and Other Precious Stones

Establishments primarily engaged in the wholesale distribution of jewelry, precious stones and metals, costume jewelry, watches, clocks, silverware, and jewelers' findings.

Clocks—wholesale
Diamonds (gems)—wholesale
Gem stones—wholesale
Jewelers' findings—wholesale
Jewelry—wholesale

Precious metals—wholesale
Precious stones (gems)—wholesale
Silverware and plated ware—wholesale
Watches and parts—wholesale

5000 Durable Goods, Not Elsewhere Classified

Establishments primarily engaged in the wholesale distribution of durable goods, not elsewhere classified, such as musical instruments and forest products, except lumber.

Fire extinguishers—wholesale
Game machines, coin-operated—whole-
sale
Gas lighting fixtures—wholesale
Logs, bawn ties, posts, and poles—
wholesale

Luggage—wholesale
Musical instruments—wholesale
Portraits—wholesale
Phonograph records—wholesale
Signs, except electric—wholesale
Timber products, rough—wholesale

WHOLESALE TRADE

251

**Major Group 51.—WHOLESALE TRADE—NONDURABLE
GOODS**

This major group includes establishments primarily engaged in the wholesale distribution of nondurable goods.

Group Industry
No. No.

511 PAPER AND PAPER PRODUCTS**5111 Printing and Writing Paper**

Establishments primarily engaged in the wholesale distribution of writing paper, including envelope paper, fine paper, and ground wood, printing and rotogravure paper.

Paper, fine or printing and writing—
wholesale

Printing paper—wholesale

5112 Stationery Supplies

Establishments primarily engaged in the wholesale distribution of stationery and office supplies, including envelopes, typewriter and mimeograph paper, file cards and folders, pens, social stationery, and greeting cards.

Business forms—wholesale
Commercial stationers (not print-
ers)—wholesale
Fountain pens—wholesale
Greeting cards—wholesale
Office supplies—wholesale

Pencils, mechanical—wholesale
Sales books—wholesale
Stationery and stationery supplies—
wholesale
Writing ink—wholesale

5113 Industrial and Personal Service Paper

Establishments primarily engaged in the wholesale distribution of wrapping and other coarse paper, paperboard, cellophane, and converted paper products, such as bags, boxes, dishes, napkins and shipping supplies.

Bags, paper and plastic—wholesale
Boxes, paper—wholesale
Cardboard and products—wholesale
Closures, paper—wholesale
Containers, paper—wholesale
Cups, paper—wholesale
Dishes, paper—wholesale
Napkins, paper—wholesale

Paper, wrapping or coarse, and prod-
ucts—wholesale
Paperboard and products—wholesale
Patterns, paper—wholesale
Shipping supplies, paper (cartons,
gummed tapes, etc.)—wholesale
Towels, paper—wholesale

512 DRUGS, DRUG PROPRIETARIES AND DRUGGISTS' SUNDRIES**5122 Drugs, Drug Proprietaries, and Druggists' Sundries**

Establishments primarily engaged in the wholesale distribution of drugs, drug proprietaries, druggists' sundries, and toiletries. Establishments primarily engaged in the wholesale distribution of surgical, dental, and hospital equipment are classified in Industry 5086.

Antiseptics—wholesale
Bandages—wholesale
Biologicals and allied products—whole-
sale
Cosmetics—wholesale
Drug proprietaries—wholesale
Druggists' sundries—wholesale
Drugs—wholesale
Medical glass—wholesale
Medical rubber goods—wholesale
Medicine cabinet sundries—wholesale
Patent medicines—wholesale

Perfumes—wholesale
Pharmaceuticals—wholesale
Proprietary (patent) medicines—
wholesale
Razor blades—wholesale
Razors, nonelectric—wholesale
Toilet articles—wholesale
Toilet preparations—wholesale
Toilet soap—wholesale
Toothbrushes, except electric—whole-
sale
Vitamins—wholesale

518 APPAREL, PIECE GOODS, AND NOTIONS

Establishments primarily engaged in the wholesale distribution of woven piece goods or yard goods of natural or man-made fibers. "Converters" who buy goods in the grey, have them finished on contract, and sell at wholesale are included here. This industry does not include establishments primarily engaged in the wholesale distribution of home furnishings, which are classified in Industry 5023.

Silk piece goods, woven—wholesale
Textile converters, except knit goods—
wholesale
Textiles, woven—wholesale
Upholstery fabrics, woven—wholesale
Woolen and worsted piece goods,
woven—wholesale
Yard goods, woven—wholesale

Establishments primarily engaged in the wholesale distribution of notions (sewing and hair accessories, etc.), knit goods, and other dry goods, except piece goods.

Notions—wholesale
Sewing accessories—wholesale
Sewing thread, except industrial—
wholesale
Tape, textile—wholesale
Zippers—wholesale

Establishments primarily engaged in the wholesale distribution of men's and boys' apparel and furnishings, sportswear, hosiery, underwear, nightwear, and work clothing.

Outerwear, men's and boys'—wholesale
Overcoats, men's and boys'—wholesale
Shirts, men's and boys'—wholesale
Sportswear, men's and boys'—wholesale
Suits, men's and boys'—wholesale
Trousers, men's and boys'—wholesale
Underwear, men's and boys'—wholesale
Work clothing, men's and boys'—wholesale

Establishments primarily engaged in the wholesale distribution of women's, children's, and infants' clothing and accessories, including hosiery, lingerie, millinery and millinery supplies, and furs.

Hosiery: women's, children's and infants'—wholesale
 Infants' wear—wholesale
 Ladies' handkerchiefs—wholesale
 Ladies' purses—wholesale
 Lingerie—wholesale
 Millinery—wholesale
 Millinery supplies—wholesale
 Mittens: women's, children's and infants'—wholesale
 Nightwear: women's, children's and infants'—wholesale
 Outerwear: women's, children's and infants'—wholesale
 Skirts—wholesale
 Sportswear: women's and children's—wholesale
 Suits: women's, children's and infants'—wholesale
 Underwear: women's, children's and infants'—wholesale

WHOLESALE TRADE

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Group Industry
No. No.**513 APPAREL, PIECE GOODS, AND NOTIONS—Continued****5139 Footwear**

Establishments primarily engaged in the wholesale distribution of footwear of leather, rubber and other materials.

Footwear, all kinds—wholesale
Shoe accessories—wholesale

Shoes—wholesale

514**GROCERIES AND RELATED PRODUCTS****5141 Groceries, General Line**

Establishments primarily engaged in the wholesale distribution of a general line of groceries. Establishments primarily engaged in roasting coffee, and establishments primarily engaged in blending tea or grinding and packaging spices, are classified in Major Group 20.

Food brokers, general line—wholesale

Groceries, general line—wholesale

5142 Frozen Foods

Establishments primarily engaged in the wholesale distribution of packaged quick-frozen vegetables, juices, meats, fish, poultry, pastries and other "deep freeze" products. Establishments primarily engaged in the wholesale distribution of frozen dairy products are classified in Industry 5143, and frozen poultry, fish and meat which are not packaged in Industries 5144, 5146, and 5147, respectively.

Dinners, frozen—wholesale
Fish, frozen: packaged—wholesale
Frozen foods, packaged—wholesale
Frozen vegetables—wholesale
Fruit juices, frozen—wholesale
Fruits, frozen—wholesale

Meat, frozen: packaged—wholesale
Meat pies, frozen—wholesale
Pies, fruit: frozen—wholesale
Poultry pies, frozen—wholesale
Soup, frozen—wholesale

5143 Dairy Products

Establishments primarily engaged in the wholesale distribution of dairy products, such as butter, cheese, ice cream and ices, and fluid milk and cream. This industry does not include establishments primarily engaged in pasteurizing and bottling milk, which are classified in Group 202.

Butter—wholesale
Cheese—wholesale
Cream stations—wholesale
Dairy depots—wholesale
Dairy products—wholesale

Ice cream and ices—wholesale
Milk and cream, fluid—wholesale
Milk cooling stations, operated by farm
assemblers
Milk depots—wholesale

5144 Poultry and Poultry Products

Establishments primarily engaged in the wholesale distribution of poultry and poultry products, except canned and packaged frozen products. This industry does not include establishments primarily engaged in the killing and dressing of poultry, which are classified in Industry 2016. Establishments primarily engaged in the wholesale distribution of packaged frozen poultry are classified in Industry 5142, and of canned poultry in Industry 5149.

Eggs: cleaning, oil treating, packing,
and grading—wholesale
Eggs—wholesale

Poultry: live, dressed, or frozen (ex-
cept packaged)—wholesale
Poultry products—wholesale

5145 Confectionery

Establishments primarily engaged in the wholesale distribution of confectionery, such as candy, chewing gum, fountain fruits, salted or roasted nuts, popcorn, and fountain sirups, and potato, corn, and similar chips.

Candy—wholesale
Chewing gum—wholesale
Confectionery—wholesale
Corn chips—wholesale
Fountain fruits and sirups—wholesale

Nuts, salted or roasted—wholesale
Popcorn—wholesale
Potato chips—wholesale
Salted nuts—wholesale

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

514 GROCERIES AND RELATED PRODUCTS—Continued

5146 Fish and Seafoods

Establishments primarily engaged in the wholesale distribution (but not packaging) of fresh, cured, or frozen fish and seafoods, except canned (Industry 5149) or packaged frozen (Industry 5142). The preparation of fresh or frozen packaged fish and other seafood, and the shucking and packing of fresh oysters in nonsealed containers, are classified in Industry 2092.

Fish, cured—wholesale
Fish, fresh—wholesale
Fish, frozen, except packaged—wholesale

Seafoods, not canned or frozen packaged—wholesale

5147 Meats and Meat Products

Establishments primarily engaged in the wholesale distribution of fresh, cured, and processed (but not canned) meats and lard. The wholesale distribution of frozen packaged meats is classified in Industry 5142; and canned meats in Industry 5149.

Lard—wholesale
Meats, cured or smoked—wholesale

Meats, fresh—wholesale

5148 Fresh Fruits and Vegetables

Establishments primarily engaged in the wholesale distribution of fresh fruits and vegetables.

Banana ripening for the trade
Fruits, fresh—wholesale

Vegetables, fresh—wholesale

5149 Groceries and Related Products, Not Elsewhere Classified

Establishments primarily engaged in the wholesale distribution of groceries and related products, not elsewhere classified. Establishments primarily engaged in the wholesale distribution of soft drinks, and in bottling and distributing natural spring and mineral waters, are classified in this industry, but establishments primarily engaged in bottling soft drinks are classified in Major Group 20. This industry does not include farm-product raw materials (Group 515), or beer, wine, and distilled alcoholic beverages (Group 518).

Bagging of tea
Bakery products—wholesale
Beverage concentrates—wholesale
Bottling mineral or spring water—wholesale
Breakfast cereals—wholesale
Canned goods: fruits, vegetables, fish, seafoods, meats, milk—wholesale
Chocolate—wholesale
Cleaning of dry foods and spices—wholesale
Coffee, green or roasted—wholesale
Cooking oils—wholesale
Dairy products, dried or canned—wholesale

Flour—wholesale
Fruit peel—wholesale
Fruits, dried—wholesale
Honey—wholesale
Oleomargarine—wholesale
Pickles, preserves, jellies, jams, and sauces—wholesale
Pretzels—wholesale
Rice, polished—wholesale
Sandwiches—wholesale
Soft drinks—wholesale
Spices—wholesale
Sugar, refined—wholesale
Tea—wholesale
Yeast—wholesale

515 FARM-PRODUCT RAW MATERIALS

5152 Cotton

Establishments primarily engaged in buying and/or marketing cotton and cotton linters.

Cotton merchants, not members of exchanges—wholesale
Cotton, raw—wholesale

Country buyers of cotton or cotton linters

WHOLESALE TRADE

255

Group Industry
No. No.

515 FARM-PRODUCT RAW MATERIALS—Continued

5153 Grain

Establishments primarily engaged in buying and/or marketing grain (such as corn, wheat, oats, barley, and unpolished rice); dry beans; soybeans and other inedible beans. Country grain elevators primarily engaged in buying or receiving grain from farmers are included as well as terminal elevators and other merchants marketing grain.

Beans, dry: bulk—wholesale
Beans, inedible—wholesale
Beans, unshelled—wholesale
Corn—wholesale

Grain—wholesale
Grain elevators, except storage only
Rice, unpolished—wholesale
Wheat—wholesale

5154 Livestock

Establishments primarily engaged in buying and/or marketing cattle, hogs, sheep, and goats. This industry also includes the operation of livestock auction markets.

Auctioning livestock—wholesale
Cattle—wholesale
Goats—wholesale
Hogs—wholesale

Livestock, except horses and mules—wholesale
Sheep—wholesale

5159 Farm-Product Raw Materials, Not Elsewhere Classified

Establishments primarily engaged in buying and/or marketing farm products, not elsewhere classified, such as horses and mules, leaf tobacco, hides, skins, furs, wool, mohair, raw silk, hops, and nuts, except roasted or salted (Industry 5145). Establishments primarily engaged in the wholesale distribution of milk are classified in Industry 5143; and live poultry in Industry 5144.

Animal hair—wholesale
Bristles—wholesale
Broomcorn—wholesale
Buyers of raw farm products, except cotton, grain, and livestock—wholesale
Chicks—wholesale
Dealers in raw farm products, except cotton, grain and livestock—wholesale
Feathers—wholesale
Fibers, vegetable—wholesale
Furs, raw—wholesale
Hides (may include curing)—wholesale
Hops—wholesale
Horses—wholesale
Merchants of raw farm products, except cotton, grain, and livestock

Mohair, raw—wholesale
Moss—wholesale
Mules—wholesale
Oil kernels—wholesale
Oil nuts—wholesale
Oil seeds—wholesale
Peanuts (bulk), unroasted—wholesale
Pecan shellers—wholesale
Pelts—wholesale
Silk, raw—wholesale
Skins, raw—wholesale
Sugar, raw—wholesale
Tobacco auctioning and warehousing—wholesale
Tobacco (leaf) exporters—wholesale
Wool, raw—wholesale
Wool tops and nolls—wholesale

516

CHEMICALS AND ALLIED PRODUCTS

5161 Chemicals and Allied Products

Establishments primarily engaged in the wholesale distribution of chemicals and allied products, not elsewhere classified, such as acids, industrial and heavy chemicals, dyestuffs, industrial salts, naval stores, plastics materials, rosin, and turpentine. Establishments primarily engaged in the wholesale distribution of ammunition are classified in Industry 5041; agricultural chemicals and pesticides in Industry 5191; drugs in Industry 5122; and paints and varnishes in Industry 5198.

Acids—wholesale
Admixture, concrete—wholesale
Alcohol, industrial—wholesale
Ammonia, except for fertilizer—wholesale
Caustic soda—wholesale
Chemical bulk stations and terminals—wholesale
Chemicals, industrial and heavy—wholesale
Coal tar products, primary and intermediate—wholesale
Concrete additives—wholesale
Detergents—wholesale
Drilling mud—wholesale
Dyestuffs—wholesale
Essential oils—wholesale

Explosives, all kinds except ammunition and fireworks—wholesale
Gases, compressed and liquefied: except liquefied petroleum gas—wholesale
Laundry soap, chips, and powder—wholesale
Metal cyanides—wholesale
Metal polishes—wholesale
Metal salts—wholesale
Naval stores—wholesale
Oil additives—wholesale
Organic chemicals, synthetic—wholesale
Plastics materials—wholesale
Resins, synthetic—wholesale
Rosin—wholesale
Salts, industrial—wholesale
Turpentine—wholesale

STANDARD INDUSTRIAL CLASSIFICATION

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WHOLESALE TRADE

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Group Industry
No. No.

519

MISCELLANEOUS NONDURABLE GOODS—Continued**5198 Paints, Varnishes, and Supplies**

Establishments primarily engaged in the wholesale distribution of paints, varnishes, wallpaper and supplies. Glass is frequently handled. Establishments selling to the general public and known as "retail" in the trade are classified in Industry 5231.

Calcimines—wholesale
Colors and pigments—wholesale
Enamels—wholesale
Lacquers—wholesale
Paint brushes, rollers, sprayers—
wholesale

Paints—wholesale
Shellac—wholesale
Varnishes—wholesale
Wallpaper—wholesale

5199 Nondurable Goods, Not Elsewhere Classified

Establishments primarily engaged in the wholesale distribution of nondurable goods, not elsewhere classified, such as books, periodicals and newspapers, art goods, flowers and florist supplies, industrial yarn, textile bags, and bagging and burlap.

Advertising specialties—wholesale
Art goods—wholesale
Artists' materials—wholesale
Automobile fabrics—wholesale
Bags, textile—wholesale
Baling of wood shavings for mulch—
wholesale
Books—wholesale
Box shooks—wholesale
Burlap—wholesale
Canvas products—wholesale
Charcoal—wholesale
Christmas trees—wholesale
Clothes hangers—wholesale
Cordwood—wholesale
Cotton yarns—wholesale
Felt—wholesale
Florists—wholesale
Flowers, artificial—wholesale
Flowers, fresh—wholesale
Foam rubber—wholesale
Gifts and novelties—wholesale
Greases, animal and vegetable—whole-
sale
Hop extract—wholesale
Ice, manufactured or natural—whole-
sale
Leather and cut stock—wholesale

Leather goods, except footwear, gloves,
luggage, and belting—wholesale
Lighters, cigar and cigarette—whole-
sale
Linseed oil—wholesale
Magazines—wholesale
Malt extract—wholesale
Malt—wholesale
Molasses, industrial—wholesale
Newspaper agencies—wholesale
Novelties, paper—wholesale
Nursery stock—wholesale
Oils, except cooking: animal and vege-
table—wholesale
Pipes, smokers—wholesale
Plants, potted—wholesale
Plastic foam—wholesale
Rayon yarns—wholesale
Rennet—wholesale
Rubber, crude—wholesale
Sausage casings—wholesale
Sheet music—wholesale
Silk yarns—wholesale
Smokers' supplies—wholesale
Wigs—wholesale
Woolen and worsted yarns—wholesale
Yarns—wholesale

Division G

Retail Trade

The Division as a Whole

This division includes establishments engaged in selling merchandise for personal or household consumption, and rendering services incidental to the sale of the goods. In general, retail establishments are classified by kind of business according to the principal lines of commodities sold (groceries, hardware, etc.), or the usual trade designation (drug store, cigar store, etc.). Some of the important characteristics of retail trade establishments are: the establishment is usually a place of business and is engaged in activities to attract the general public to buy; the establishment buys or receives merchandise as well as sells; the establishment may process its products, but such processing is incidental or subordinate to selling; the establishment is considered as retail in the trade; and the establishment sells to customers for personal or household use. Not all of these characteristics need be present and some are modified by trade practice.

For the most part, establishments engaged in retail trade sell merchandise to the general public for personal or household consumption. Exceptions to this general rule are made necessary by trade practices. For example, lumber yards and paint, glass and wallpaper stores are included in Retail Trade if they sell to the general public, even if a higher proportion of their sales is made to contractors. However, establishments that sell exclusively to business establishments, institutional and industrial users, or contractors are classified in Wholesale Trade.

Establishments engaged in selling to the general public, from displayed merchandise, products such as typewriters, stationery, or gasoline are classified in Retail Trade even though such products may not be used for personal or household consumption. However, establishments that sell these products only to institutional or industrial users and establishments that sell similar merchandise for use exclusively by business establishments are classified in Wholesale Trade.

Buying of goods for resale to the consumer is a characteristic of retail trade establishments that particularly distinguishes them from the agricultural and extractive industries. For example, farmers who sell only their own produce at or from the point of production are not classified as retailers.

Processing incidental or subordinate to selling often is conducted at retail stores. For example, restaurants prepare meals, and meat markets cut meat. Retail establishments of manufacturing concerns are included in Retail Trade.

Chain store warehouses are considered auxiliary to the retail establishment served and are classified on the basis of the activity carried on by such retail stores.

Establishments primarily engaged in the retail sale of used motor vehicles, trailers, and boats are classified in Major Group 55; of used mobile homes in Industry 5271; and of all other used merchandise in Group 593. Establishments primarily engaged in nonstore retailing are included in Group 596.

The Major Group as a Whole

It includes lumber and other building materials dealers and paint, glass and wallpaper stores selling to the general public, even if sales to contractors account for a larger proportion of total sales. These establishments are known as "retail" in the trade. Establishments primarily selling these products but not selling to the general public are classified in Wholesale Trade.

Establishments primarily selling plumbing, heating and air conditioning equipment and electrical supplies are classified in Wholesale Trade.

521 LUMBER AND OTHER BUILDING MATERIALS DEALERS

Establishments engaged in selling primarily lumber, or lumber and a general line of building materials, to the general public. While these establishments may also sell to contractors, they are known as "retail" in the trade. The lumber which they sell may include rough and dressed lumber, flooring, molding, doors, sashes, frames and other millwork. The building materials may include roofing, siding, shingles, wallboard, paint, brick, tile, cement, sand, gravel and other building materials and supplies. Hardware is often an important line of retail lumber and building materials dealers. Establishments which do no selling to the general public or those which are known in the trade as "wholesale" are classified in Group 508.

Brick and tile dealers—retail
Building materials dealers—retail
Buildings, prefabricated—retail
Cabinets, kitchen: to be installed—retail
Cement dealers—retail
Concrete and cinder block dealers—retail
Fallout shelters—retail
Fencing dealers—retail
Flooring, wood—retail
Garage doors, sale and installation—retail
Insulation material, building—retail

Jalousies—retail
Lime and plaster dealers—retail
Lumber and building material dealers—retail
Lumber and planing mill product dealers—retail
Millwork and lumber dealers—retail
Roofing material dealers—retail
Sand and gravel dealers—retail
Storm windows and sash, wood or metal—retail
Structural clay products—retail
Wallboard (composition) dealers—retail

5231 Paint, Glass, and Wallpaper Stores

Establishments engaged in selling primarily paint, glass, and wallpaper, or any combination of these lines, to the general public. While these establishments may also sell to contractors, they are known as "retail" in the trade. Establishments which do no selling to the general public or are known in the trade as "wholesale" are classified in Wholesale Trade.

Glass stores—retail
Paint brushes, rollers, and sprayers—
retail

Paint stores—retail
Wallpaper stores—retail

525 **HARDWARE STORES**

5251 Hardware Stores

Establishments primarily engaged in the retail sale of a number of basic hardware lines, such as tools, builders' hardware, paint and glass, housewares and household appliances and cutlery.

Builder's hardware—retail
Chainsaws—retail
Hand tools—retail

Hardware stores—retail
Tools, power and hand—retail

RETAIL TRADE

261

Group Industry
No. No.

526 RETAIL NURSERIES, LAWN AND GARDEN SUPPLY STORES**5261 Retail Nurseries, Lawn and Garden Supply Stores**

Establishments primarily engaged in selling trees, shrubs, other plants, seeds, bulbs, mulches, soil conditioners, fertilizers, pesticides, garden tools, and other garden supplies to the general public. These establishments primarily sell products purchased from others, but may sell some plants which they grow themselves. Establishments primarily engaged in growing are classified in Major Group 01.

Christmas trees (natural)—retail
Fertilizer—retail
Garden supplies and tools—retail
Lawn mowers—retail

Lawn sprinklers—retail
Nursery stock, seeds and bulbs—retail
Power mowers—retail

527 MOBILE HOME DEALERS**5271 Mobile Home Dealers**

Establishments primarily engaged in the retail sale of new and used mobile homes. Establishments primarily selling travel trailers and campers are classified in Industry 5561.

Mobile homes, new and used—retail

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STANDARD INDUSTRIAL CLASSIFICATION

Major Group 53.—GENERAL MERCHANDISE STORES*The Major Group as a Whole*

This major group includes retail stores which sell a number of lines of merchandise, such as dry goods, apparel and accessories, furniture and home furnishings, small wares, hardware, and food. The stores included in this group are known as department stores, variety stores, general merchandise stores, general stores, etc. Establishments primarily engaged in selling used general merchandise are classified in Group 593, and those selling general merchandise by mail, vending machine, or direct selling in Group 596.

Group Industry
No. No.

531 DEPARTMENT STORES**5311 Department Stores**

Retail stores carrying a general line of apparel, such as suits, coats, dresses, furnishings; home furnishings, such as furniture, floor coverings, curtains, draperies, linens, major household appliances; and housewares such as table and kitchen appliances, dishes, and utensils. These and other merchandise lines are normally arranged in separate sections or departments with the accounting on a departmentalized basis. The departments and functions are integrated under a single management. The stores usually provide their own charge accounts, deliver merchandise and maintain open stocks.

Department stores—retail

533 VARIETY STORES**5331 Variety Stores**

Establishments primarily engaged in the retail sale of a variety of merchandise in the low and popular price ranges. Sales usually are made on a cash-and-carry basis, with the open selling method of display and customer selection of merchandise. These stores generally do not carry a complete line of merchandise, are not departmentalized, do not carry their own charge service, and do not deliver merchandise.

Limited price variety stores—retail

Variety stores, limited price—retail

539 MISCELLANEOUS GENERAL MERCHANDISE STORES**5399 Miscellaneous General Merchandise Stores**

Establishments primarily engaged in the retail sale of a general line of apparel, dry goods, hardware, homewares or home furnishings, groceries, and other lines in limited amounts. Stores selling commodities covered in the definition for Department Stores, but normally having less than 25 employees, and stores usually known as country general stores are included in this industry.

Country general stores—retail
General merchandise stores—retail

General stores—retail

RETAIL TRADE

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Major Group 54.—FOOD STORES*The Major Group as a Whole*

This major group includes retail stores primarily engaged in selling food for home preparation and consumption. Establishments primarily engaged in selling prepared foods and drinks for consumption on the premises are classified in Major Group 58, and stores primarily engaged in selling packaged beers and liquors in Industry 5921.

Group Industry
No. No.

541 GROCERY STORES**5411 Grocery Stores**

Stores, commonly known as supermarkets, food stores, grocery stores and delicatessen stores, primarily engaged in the retail sale of all sorts of canned foods and dry goods, either packaged or in bulk, such as tea, coffee, spices, sugar, and flour; fresh fruits and vegetables; and frequently fresh, smoked and prepared meats, fish, and poultry.

Delicatessen stores—retail
Food markets—retail
Frozen food and freezer plans, except
meat—retail

Grocery stores, with or without fresh
meat—retail

542 MEAT AND FISH (SEAFOOD) MARKETS, INCLUDING FREEZER PROVISIONERS**5422 Freezer and Locker Meat Provisioners**

Establishments primarily engaged in the retail sale, on a bulk basis, of meat for freezer storage. This industry also includes establishments primarily providing home freezer plans. Food locker plants primarily engaged in renting locker space for the storage of food products for individual households are classified in Industry 4222.

Food and freezer plans, meat—retail
Freezer food plans, meat—retail

Freezer provisioners, meat—retail
Frozen food plans, meat—retail

5423 Meat and Fish (Seafood) Markets

Establishments primarily engaged in the retail sale of fresh, frozen or cured meats (other than freezer and locker provisioners), fish, shellfish, and other seafoods. They may also sell poultry, dairy products, eggs, and other commodities. Meat markets may butcher animals on their own account, or they may buy from others.

Fish markets—retail
Meat markets—retail

Seafood markets—retail

543 FRUIT STORES AND VEGETABLE MARKETS**5431 Fruit Stores and Vegetable Markets**

Establishments primarily engaged in the retail sale of fresh fruits and fresh vegetables. They are frequently found in public or municipal markets.

Fruit and vegetable stands—retail
Fruit stores—retail

Vegetable markets—retail

544 CANDY, NUT, AND CONFECTIONERY STORES**5441 Candy, Nut, and Confectionery Stores**

Establishments primarily engaged in the retail sale of candy, nuts, sweetmeats, popcorn, and other confections. Operation of a soda fountain or lunch counter is common.

Candy stores—retail
Confectionery produced for direct sale
on the premises—retail

Confectionery stores—retail
Nut stores—retail
Popcorn stands—retail

STANDARD INDUSTRIAL CLASSIFICATION

545

5451 Dairy Products Stores

Butter and other dairy product stores—retail
Cheese stores—retail
Dairy products stores—retail

Ice cream (packaged) stores—retail
Milk and other dairy products stores—
retail

RETAIL BAKERIES

Establishments primarily engaged in the retail sale of bakery products, such as bread, cakes, and pies, and which produce some or all of the products sold on the premises. Establishments manufacturing bakery products and selling them chiefly through house-to-house routes are classified in manufacturing (Industry 2051). Establishments purchasing bakery products and selling house-to-house are classified in Industry 5063.

Doughnut shop—retail

Establishments primarily engaged in the retail sale of bakery products, such as bread, cakes, and pies, none of which are produced on the premises.

Retail bakeries—selling only

MISCELLANEOUS FOOD STORES

Establishments primarily engaged in the retail sale of specialized foods, not elsewhere classified, such as eggs and poultry, health foods, spices, herbs, coffee, and tea. The poultry stores may sell live poultry, slaughter and clean poultry for their own account and sell dressed fowls, or sell fowl cleaned and dressed by others.

Coffee stores—retail
Dietetic food stores—retail
Egg and poultry dealers—retail
Health food stores—retail

Spice and herb stores—retail
Tea stores—retail
Vitamin food stores—retail
Water, mineral—retail

RETAIL TRADE

265

Major Group 55.—AUTOMOTIVE DEALERS AND GASOLINE SERVICE STATIONS*The Major Group as a Whole*

This major group includes retail dealers selling new and used automobiles, boats, recreational and utility trailers, and motorcycles; those selling new automobile parts and accessories; and gasoline service stations. This group includes establishments dealing in used automobiles exclusively, but not establishments dealing exclusively in used parts (Industry 5931). Automobile repair shops maintained by the establishments engaged in the sale of new automobiles are also included. Automotive distributors, the greater part of whose sales are to dealers or to institutional or industrial users, are classified in Wholesale Trade.

Group Industry
No. No.

551 MOTOR VEHICLE DEALERS (NEW AND USED)**5511 Motor Vehicle Dealers (New and Used)**

Establishments primarily engaged in the retail sale of new automobiles, or new and used automobiles. These establishments frequently maintain repair departments and carry stocks of replacement parts, tires, batteries, and automotive accessories.

Automobile agencies (dealers)—retail
Automobiles, new and used—retail
Cars, new and used—retail

Motor vehicle dealers, new and used
cars—retail

552 MOTOR VEHICLE DEALERS (USED ONLY)**5521 Motor Vehicle Dealers (Used Only)**

Establishments primarily engaged in the retail sale of used cars only, with no sales of new automobiles.

Antique autos—retail
Automobiles, used cars only—retail

Motor vehicle dealers, used cars only—
retail

553 AUTO AND HOME SUPPLY STORES**5531 Auto and Home Supply Stores**

Establishments primarily engaged in the retail sale of automobile tires, batteries, and other automobile parts and accessories. Such establishments frequently sell a substantial amount of home appliances, radios and television sets. They frequently have facilities for tire recapping and vulcanizing. Establishments dealing primarily in used parts are classified in Industry 5931. Establishments primarily engaged in both selling and installing such automotive parts as transmissions, mufflers, brake linings, and glass are classified in Industry Group 753.

Automobile accessory dealers—retail
Automobile air conditioning equipment,
sale and installation—retail

Automobile parts dealers—retail
Automobile tire dealers—retail
Battery dealers, automobile—retail

554 GASOLINE SERVICE STATIONS**5541 Gasoline Service Stations**

Gasoline service stations primarily engaged in selling gasoline and lubricating oils, and which may sell other merchandise or perform minor repair work.

Automobile service stations—retail
Filling stations, gasoline—retail
Gas and oil—retail

Marine service stations—retail
Service stations, gasoline—retail

555 BOAT DEALERS**5551 Boat Dealers**

Establishments primarily engaged in the retail sale of new and used motorboats and other watercraft, marine supplies, and outboard motors.

Boat dealers—retail
Marine supply dealers—retail

Motorboat dealers—retail
Outboard motor dealers—retail

266

STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

556

RECREATIONAL AND UTILITY TRAILER DEALERS**5561 Recreational and Utility Trailer Dealers**

Establishments primarily engaged in the retail sale of new and used recreational trailers, campers (pickup coaches), utility trailers and other trailers for passenger automobiles, and motor homes. Establishments primarily engaged in the retail sale of mobile homes are classified in Industry 5271.

Campers (pickup coaches) for mounting on trucks—retail
Motor home dealers—retail

Travel trailers: automobile, new and used—retail
Utility trailers—retail

557

MOTORCYCLE DEALERS**5571 Motorcycle Dealers**

Establishments primarily engaged in the retail sale of new and used motorcycles and motor scooters.

Bicycles, motorized—retail
Motor scooters—retail

Motorcycle dealers—retail

559

AUTOMOTIVE DEALERS, NOT ELSEWHERE CLASSIFIED**5599 Automotive Dealers, Not Elsewhere Classified**

Establishments primarily engaged in the retail sale of new and used automotive vehicles and new equipment and supplies, not elsewhere classified, such as snowmobiles, dunebuggies and go-carts.

Aircraft dealers—retail
Dunebuggies—retail

Go-carts—retail
Snowmobiles—retail

RETAIL TRADE

267

Major Group 56.—APPAREL AND ACCESSORY STORES*The Major Group as a Whole*

This major group includes retail stores primarily engaged in selling new clothing, shoes, hats, underwear, and related articles for personal wear and adornment. Furriers and custom tailors carrying stocks of materials are included in this group.

Group Industry
No. No

561 MEN'S AND BOYS' CLOTHING AND FURNISHINGS STORES**5611 Men's and Boys' Clothing and Furnishings Stores**

Establishments primarily engaged in the retail sale of men's and boys' ready-to-wear clothing and furnishings.

Clothing stores, men's and boys'—
retail
Furnishing stores, men's and boys'—
retail

Haberdashery stores—retail
Hat stores, men's and boys'—retail
Men's wearing apparel—retail
Tie shops—retail

562 WOMEN'S READY-TO-WEAR STORES**5621 Women's Ready-to-Wear Stores**

Establishments primarily engaged in the retail sale of women's ready-to-wear coats, suits, and dresses.

Bridal shops, except custom—retail
Clothing, ready-to-wear: women's—
retail
Dress shops—retail

Maternity shops—retail
Ready-to-wear stores, women's—retail
Teenage apparel shops—retail

563 WOMEN'S ACCESSORY AND SPECIALTY STORES**5631 Women's Accessory and Specialty Stores**

Establishments primarily engaged in the retail sale of women's accessories and specialties, such as millinery (ready-to-wear and custom made), blouses, knitwear, foundation garments, lingerie, hosiery, costume jewelry, gloves, and handbags.

Apparel accessory stores—retail
Blouse stores—retail
Corset and lingerie stores—retail
Costume jewelry stores—retail
Foundation garments—retail

Glove stores—retail
Handbag stores—retail
Hosiery stores—retail
Knitwear stores, women's—retail
Millinery stores—retail

564 CHILDREN'S AND INFANTS' WEAR STORES**5641 Children's and Infants' Wear Stores**

Establishments primarily engaged in the retail sale of children's and infants' clothing, furnishings, and accessories. Such establishments may specialize in either children's or infants' wear or they may sell a combination of children's and infants' wear.

Children's wear stores—retail

Infants' wear stores—retail

565 FAMILY CLOTHING STORES**5651 Family Clothing Stores**

Establishments primarily engaged in the retail sale of clothing, furnishings, and accessories for men, women, and children, without specializing in any one line.

Family clothing stores—retail

566 SHOE STORES**5661 Shoe Stores**

Establishments primarily engaged in the retail sale of men's, women's, and children's footwear. These establishments frequently carry accessory lines, such as hosiery, gloves, and handbags.

Footwear—retail

Shoe stores—retail

268

STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

568 FURRIERS AND FUR SHOPS

5681 Furriers and Fur Shops

Retail establishments primarily engaged in selling fur coats and other fur apparel, including fur apparel made in the same establishment to custom order. Establishments primarily engaged in fur repair and storage and which also may sell a minor amount of fur apparel are classified in Industry 7219.

Fur apparel made to custom order—
retailFur shops—retail
Furriers—retail

569 MISCELLANEOUS APPAREL AND ACCESSORY STORES

5699 Miscellaneous Apparel and Accessory Stores

Establishments primarily engaged in the retail sale of specialized lines of apparel and accessories, not elsewhere classified, such as uniforms, bathing suits, raincoats, riding apparel, sports apparel, umbrellas, wigs, and toupees. This industry also includes custom tailors primarily engaged in making and selling men's and women's clothing (except fur apparel, Industry 5681) to individual order.

Bathing suit stores—retail
Belts, apparel: custom—retail
Custom tailors—retail
Dressmakers' shops, custom—retail
Knit dresses, made to order—retail
Merchant tailors—retail
Raincoat stores—retail

Riding apparel stores—retail
Shirts, custom made—retail
Sports apparel stores—retail
Umbrella stores—retail
Uniforms—retail
Wig, toupee and wiglet stores (including custom made)—retail

RETAIL TRADE

269

Major Group 57.—FURNITURE, HOME FURNISHINGS, AND EQUIPMENT STORES*The Major Group as a Whole*

This major group includes retail stores selling goods used for furnishing the home, such as furniture, floor coverings, draperies, glass and chinaware, domestic stoves, refrigerators, and other household electrical and gas appliances. Establishments selling electrical and gas appliances are included in this group only if the major part of their sales consist of articles for home use. Dealers primarily engaged in selling antique and secondhand furniture are classified in Group 593. Stores furnishing interior decorator service are classified according to the merchandise handled.

Group Industry
No. No.

571 FURNITURE, HOME FURNISHINGS, AND EQUIPMENT STORES, EXCEPT APPLIANCES**5712 Furniture Stores**

Establishments primarily engaged in the retail sale of household furniture. These stores also may sell home furnishings, major appliances, and floor coverings.

Beds and springs—retail
Cabinet work on a custom basis to individual order—retail
Cabinets, kitchen: not built in—retail
Furniture, custom made—retail

Furniture, household, with or without furnishings and appliances—retail
Juvenile furniture—retail
Mattress stores, including custom made—retail

5713 Floor Covering Stores

Establishments primarily engaged in the retail sale of floor coverings and related products. Establishments included in this industry, which may incidentally perform installation, are to be distinguished from contractors primarily engaged in installing floor coverings which are classified in Industry 1752.

Carpet stores—retail
Floor covering stores—retail
Floor tile stores—retail

Linoleum stores—retail
Rug stores—retail

5714 Drapery, Curtain, and Upholstery Stores

Establishments primarily engaged in the retail sale of draperies, curtains, and upholstery. Establishments primarily engaged in reupholstering or repairing furniture are classified in Industry 7641.

Curtain stores—retail
Drapery stores—retail

Slip cover stores—retail
Upholstery materials stores—retail

5719 Miscellaneous Home Furnishing Stores

Establishments primarily engaged in the retail sale of miscellaneous home furnishings, such as china, glassware and metalware for kitchen and table use, bedding and linen, brooms, brushes, lamps and shades, mirrors and pictures, venetian blinds, and window shades. Establishments primarily engaged in the retail sale of miscellaneous home furnishings by house-to-house canvass or by party-plan merchandising are classified in Industry 5968.

Aluminumware stores—retail
Bedding (sheets, blankets, spreads, and pillows)—retail
Brooms—retail
Brushes—retail
China stores—retail
Cookware—retail
Crockery stores—retail
Cutlery stores—retail
Enamelware stores—retail
Fireplace screens and accessories—retail

Glassware stores—retail
Housewares stores—retail
Kitchenware stores—retail
Lamp and shade shops—retail
Linen shops—retail
Metalware stores—retail
Mirrors and pictures, framed and unframed—retail
Pottery stores—retail
Tinware stores—retail
Venetian blind shops—retail
Window shade shops—retail

270

STANDARD INDUSTRIAL CLASSIFICATION

Group No.	Industry No.
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572 HOUSEHOLD APPLIANCE STORES

5722 Household Appliance Stores

Establishments primarily engaged in the retail sale of electric and gas refrigerators, stoves, and other household appliances, such as electric irons, percolators, hot plates, and vacuum cleaners. Many such stores also sell radio and television sets. Retail stores operated by public utility companies and primarily engaged in the sale of electric and gas appliances for household use are classified in this industry.

Air conditioning room units, self-contained—retail
Electric household appliance stores—retail
Freezers, household—retail
Garbage disposers, electric—retail
Household appliance stores, electric or gas—retail
Kitchens, complete (sinks, cabinets, etc.)—retail

Ranges, gas and electric—retail
Refrigerators and related electric and
gas appliances—retail
Sewing machine stores—retail
Stoves and related electric and gas ap-
pliances—retail
Vacuum cleaner stores—retail

573 RADIO, TELEVISION, AND MUSIC STORES**5722 Radio and Television Stores**

Establishments primarily engaged in the retail sale and installation of radios, television sets, record players, high fidelity (hi-fi), and sound reproducing equipment. Such establishments also may sell additional lines, such as household appliances, musical instruments, or records. Radio and television repair and installation shops are classified in Industry 7622.

High fidelity (hi-fi) equipment—retail
Phonograph stores—retail
Radio-phonograph stores—retail

Radio stores—retail
Tape recorders—retail
Television set stores—retail

5733 Music Stores

Establishments primarily engaged in the retail sale of musical instruments, phonograph records, sheet music, and similar musical supplies.

Musical instrument stores—retail
Phonograph record stores—retail
Pianos—retail

Record stores—retail
Sheet music stores—retail

RETAIL TRADE

271

Major Group 58.—EATING AND DRINKING PLACES*The Major Group as a Whole*

This major group includes retail establishments selling prepared foods and drinks for consumption on the premises, and also lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption. Restaurants, lunch counters, and drinking places operated as a subordinate service facility by other establishments are not included in this industry, unless they are operated as leased departments by outside operators. Thus, restaurants and lunch counters operated by hotels are classified in Major Group 70; those operated by department stores in Major Group 53.

Group Industry
No. No.

581 - EATING AND DRINKING PLACES**5812 Eating Places**

Establishments primarily engaged in the retail sale of prepared food and drinks for consumption on the premises. Caterers and industrial and institutional food service establishments are also included in this industry.

Automats (eating places)
Beaneries
Box lunch stands
Buffets (eating places)
Cafes
Cafeterias
Carry-out restaurants—retail
Caterers
Commissary restaurants
Dairy bars—retail
Diners (lunch stands)
Drive-in restaurants
Frozen custard stands
Grills (eating places)
Hot dog (frankfurter) stands

Ice cream stands
Lunch bars
Lunch counters
Lunch rooms
Luncheonettes
Oyster bars
Pizzerias
Refreshment stands
Restaurants
Restaurants, carry-out
Sandwich bars or shops—retail
Soda fountains
Soft drink stands—retail
Tea rooms

5813 Drinking Places (Alcoholic Beverages)

Establishments primarily engaged in the retail sale of drinks, such as beer, ale, wine, liquor, and other alcoholic beverages for consumption on the premises. The sale of food frequently accounts for a substantial portion of the receipts of these establishments.

Bars (drinking places)
Beer gardens (drinking places)
Bottle clubs (drinking places)
Cabarets
Discotheques

Drinking places
Night clubs
Saloons (drinking places)
Tap rooms (drinking places)
Taverns (drinking places)

272

STANDARD INDUSTRIAL CLASSIFICATION

Major Group 59.—MISCELLANEOUS RETAIL*The Major Group as a Whole*

This major group includes retail establishments, not elsewhere classified. These establishments fall into the following categories: drug stores, liquor stores, used merchandise stores, nonstore retailers, fuel and ice dealers, miscellaneous shopping goods stores, florists, cigar stores and stands, and miscellaneous retail stores, not elsewhere classified.

Group Industry
No. No.

591 DRUG STORES AND PROPRIETARY STORES**5912 Drug Stores and Proprietary Stores**

Establishments engaged in the retail sale of prescription drugs and patent medicines, and which may carry a number of related lines such as cosmetics, toiletries, tobacco, and novelty merchandise.

These stores are included on the basis of their usual trade designation rather than on the more strict interpretation of commodities handled. This industry includes drug stores which also operate a soda fountain or lunch counter.

Apothecaries
Drug stores

Proprietary (patent medicine) stores—
retail

592 LIQUOR STORES**5921 Liquor Stores**

Establishments primarily engaged in the retail sale of packaged alcoholic beverages, such as ale, beer, wine, and whiskey, for consumption off the premises. Stores selling prepared drinks for consumption on the premises are classified in Industry 5618.

Beer and liquor (packaged)—retail

593 USED MERCHANDISE STORES**5931 Used Merchandise Stores**

This industry includes stores primarily engaged in the retail sale of used merchandise, antiques, and secondhand goods such as clothing and shoes; furniture; books and rare manuscripts; automobile parts, accessories, tires, batteries; musical instruments; office furniture; phonographs and phonograph records; and store fixtures and equipment. This industry also includes pawnshops. Dealers primarily engaged in selling used motor vehicles, trailers, and boats are classified in Major Group 55; used mobile homes in Industry 5271; and establishments primarily engaged in automobile repair in Group 753. Scrap, waste, and junk dealers are classified in Industry 5098.

Antique stores—retail
Automobile accessories and parts, secondhand—retail
Batteries, automotive: secondhand—retail
Book stores, secondhand—retail
Brick, used only—retail
Building materials, used—retail
Clothing stores, secondhand—retail
Furniture, antique—retail
Furniture stores, secondhand—retail
Glassware, antique—retail
Home furnishings, antique—retail
Home furnishing stores, secondhand—retail
Lumber, used only—retail

Musical instrument stores, secondhand—retail
Objects of art, antique—retail
Office furniture stores, secondhand—retail
Pawnshops
Phonograph and phonograph record stores, secondhand—retail
Secondhand furniture stores—retail
Secondhand tire dealers—retail
Shoe stores, secondhand—retail
Store fixture and equipment stores, secondhand—retail
Tire (automobile) dealers, secondhand—retail

RETAIL TRADE

273

Group Industry
No. No.
594

MISCELLANEOUS SHOPPING GOODS STORES**5941 Sporting Goods Stores and Bicycle Shops**

Establishments primarily engaged in the retail sale of sporting goods; sporting equipment; bicycles; and bicycle parts and accessories. Stores primarily engaged in repairing bicycles are classified in Industry 7699 and those engaged in renting bicycles in Industry 7999. Retail establishments primarily selling motorized bicycles are classified in Industry 5571.

Ammunition—retail
Bait and tackle shops—retail
Bicycle and bicycle parts dealers, except motorized—retail
Bowling equipment and supplies—retail
Camping equipment—retail
Exercise apparatus—retail
Firearms—retail
Fishermen's equipment—retail
Golf goods and equipment—retail

Golf professionals, operating retail stores
Gymnasium equipment—retail
Hunters' equipment—retail
Playground equipment—retail
Pool and billiard table stores—retail
Riding goods and equipment—retail
Saddlery stores—retail
Skiing equipment—retail
Sporting goods stores—retail
Tennis goods and equipment—retail

5942 Book Stores

Establishments primarily engaged in the retail sale of new books and magazines.

Book stores, selling new books and magazines—retail

Religious book stores—retail

5943 Stationery Stores

Establishments primarily engaged in the retail sale of stationery, such as paper and paper products (including printing and engraving), post cards, and novelties. Stores specializing in the sale of artists' supplies are classified in Industry 5999.

Accounting and legal forms—retail
Blankbooks and forms—retail
Office forms and supplies—retail
Pen and pencil shops—retail

School supplies—retail
Stationery stores—retail
Writing supplies—retail

5944 Jewelry Stores

Establishments primarily engaged in the retail sale of any combination of the lines of jewelry, such as diamonds and other precious stones mounted in precious metals as rings, bracelets, and brooches; sterling and plated silverware; and watches and clocks. Stores primarily engaged in watch and jewelry repair are classified in Industry 7681.

Clocks, including custom made—retail
Jewelry, precious stones and precious metals: including custom made—retail

Silverware—retail
Watches, including custom made—retail

5945 Hobby, Toy, and Game Shops

Establishments primarily engaged in the retail sale of toys, games, and hobby kits and supplies. Establishments primarily engaged in selling artists' supplies, or collectors items, such as coins, stamps, and autographs, are classified in Industry 5999.

Game shops—retail
Hobby shops—retail

Toy and game stores—retail

5946 Camera and Photographic Supply Stores

Establishments primarily engaged in the retail sale of cameras, film and other photographic supplies and equipment. Establishments primarily engaged in finishing films are classified in Industry 7395.

Camera shops—retail

Photographic supply stores—retail

5947 Gift, Novelty, and Souvenir Shops

Establishments primarily engaged in the retail sale of combined lines of gifts and novelty merchandise, souvenirs, and miscellaneous small art goods such as greeting cards and holiday decorations.

Curio shops—retail
Gift shops—retail
Greeting card shops—retail

Novelty shops—retail
Souvenir shops—retail

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

594 MISCELLANEOUS SHOPPING GOODS STORES—Continued

5948 Luggage and Leather Goods Stores

Establishments primarily engaged in the retail sale of luggage, trunks, and leather goods.

Leather goods made to individual order—retail
Luggage and leather goods stores—retail

Trunks (luggage)—retail

5949 Sewing, Needlework, and Piece Goods Stores

Establishments primarily engaged in the retail sale of sewing supplies, fabrics, patterns, and other needlework accessories.

Fabric shops—retail
Knitting yarn shops—retail
Mill end stores—retail
Notion stores—retail

Piece goods—retail
Remnant stores—retail
Yard goods stores—retail
Yarn shops (knitting)—retail

596

NONSTORE RETAILERS

5961 Mail Order Houses

Establishments primarily engaged in the retail sale of products by catalog and mail order. Departmentalized retail stores with normally 25 or more employees, operated by mail order houses and selling a general line of merchandise, are classified in Industry 5811. Retail stores selling a general line of merchandise, with normally less than 25 employees and operated by mail order houses, are classified in Industry 5390.

Book clubs, not publishing
Books, mail order—retail
Catalog (order taking) offices of mail order houses—retail
Coins, mail order—retail
Fruit in fancy baskets, mail order—retail
Jewelry, mail order—retail

Mail order houses—retail (not including retail outlets)
Novelty merchandise, mail order—retail
Order taking offices of mail order houses—retail
Record clubs, mail order—retail
Stamps, mail order—retail

5962 Automatic Merchandising Machine Operators

Establishments primarily engaged in the retail sale of products by means of automatic merchandising units, also referred to as vending machines. This industry does not include coin-operated service machines, such as music machines and amusement and game machines (Industry 7998), and lockers and scales (Industry 7299).

Coin-operated machines selling merchandise
Dispensing machine sale of products—retail

Merchandising, automatic (sale of products through vending machines)
Vending machine sale of products

5963 Direct Selling Establishments

Establishments primarily engaged in the retail sale of merchandise by telephone or house-to-house canvass. Included in this industry are individuals who sell products by this method and who are not employees of the organization which they represent, and establishments which are retail sales offices from which employees operate to sell merchandise from door-to-door.

Bakery goods (purchased), house-to-house—retail
Canvassers (door-to-door), headquarters for retail sale of merchandise
Dairy products, house-to-house—retail
Direct selling organizations (headquarters of door-to-door canvassers)
House delivery of purchased milk—retail
House-to-house distribution of coffee, soda, beer and bottled water, etc.

Hucksters—retail
Ice cream wagons—retail
Lunch wagons, mobile—retail
Magazines, house-to-house selling
Milk delivery and sale of purchased milk, without processing
Newspapers, home delivery—not by newspaper printers or publishers
Party-plan merchandising—retail
Selling organizations (headquarters of door-to-door canvassers)—retail

RETAIL TRADE

275

Group
No. Industry
No.

FUEL AND ICE DEALERS**5982 Fuel and Ice Dealers, Except Fuel Oil Dealers and Bottled Gas Dealers**

Establishments primarily engaged in the retail sale of coal, wood, ice, or any combination of these lines. Establishments primarily engaged in the retail sale of fuel oil are classified in Industry 5983, and those primarily engaged in the retail sale of bottled gas in Industry 5984.

Coal dealers—retail
Fuel and ice dealers; except fuel oil
and bottled gas—retail

Fuel wood, forest cut—retail
Ice dealers—retail
Wood (fuel) dealers—retail

5983 Fuel Oil Dealers

Establishments primarily engaged in the retail sale of fuel oil. Establishments primarily engaged in selling fuel oil burners are classified in Industry 5074, dealers primarily engaged in installing and servicing fuel oil burners in Industry 1711, and fuel oil burner repair service only in Industry 7899.

Fuel oil dealers—retail

5984 Liquefied Petroleum Gas (Bottled Gas) Dealers

Establishments primarily engaged in the retail sale of liquefied petroleum (LP) gas (bottled gas or in bulk).

Bottled gas—retail
Butane gas, bottled—retail

Liquefied petroleum (LP) gas, delivered
to customers' premises—retail
Propane gas, bottled—retail

599

RETAIL STORES, NOT ELSEWHERE CLASSIFIED**5992 Florists**

Establishments primarily engaged in the retail sale of cut flowers and growing plants. Stores primarily engaged in selling seeds, bulbs, and nursery stock are classified in Industry 5261, and greenhouses and nurseries primarily engaged in growing in Industry 0181.

Florists—retail
Flowers, fresh—retail

Potted plants—retail

5993 Cigar Stores and Stands

Establishments primarily engaged in the retail sale of cigars, cigarettes, tobacco, and smokers' supplies.

Cigar stores and stands—retail

Tobacconists—retail

5994 News Dealers and Newstands

Establishments primarily engaged in the retail sale of newspapers, magazines, and other periodicals. Home delivery of newspapers by other than printers or publishers is classified in Industry 5963.

Magazine stands—retail
News dealers—retail

Newstands—retail

5999 Miscellaneous Retail Stores, Not Elsewhere Classified

Establishments primarily engaged in the retail sale of specialized lines of merchandise, not elsewhere classified, such as artists' supplies; orthopedic and artificial limbs; optical goods; rubber stamps; pets; religious goods; and monuments and tombstones. This industry also includes establishments primarily engaged in selling a general line of their own or consigned merchandise at retail on an auction basis. Establishments primarily engaged in auctioning tangible personal property of others on a fee basis are classified in Industry 7899.

Architectural supplies—retail
Art dealers—retail
Artificial flowers—retail
Artists' supply and material stores—
retail

Auction rooms (general merchandise)—retail
Autograph and philatelist supply
stores—retail
Awning shops—retail

STANDARD INDUSTRIAL CLASSIFICATION

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5999 Miscellaneous Retail Stores, Not Elsewhere Classified—Continued

Pet food stores—retail
Pet shops—retail
Religious goods stores—retail
Rock and stone specimens—retail
Rubber stamp stores—retail
Sales barns—retail
**Stamps (philatelist)—retail, except
 mail order**
Stones, crystalline; rough—retail
Swimming pools, home: not installed
Telescopes—retail
Tent shops—retail
Theater programs—retail
Tombstones—retail
Trophy shops—retail
Typewriter stores—retail

Division H

Finance, Insurance, and Real Estate

The Division as a Whole

This division includes establishments operating primarily in the fields of finance, insurance, and real estate. Finance includes banks and trust companies, credit agencies other than banks, holding (but not predominantly operating) companies, other investment companies, brokers and dealers in securities and commodity contracts, and security and commodity exchanges. Insurance covers carriers of all types of insurance, and insurance agents and brokers. Real estate includes owners, lessors, lessees, buyers, sellers, agents, and developers of real estate. Establishments primarily engaged in the construction of buildings for sale (operative builders) are classified in Industry 1531.

In most cases, establishments included in this division are primarily engaged in specialized activities in either the finance, insurance, or real estate field and can therefore be classified in one of the major groups provided for these activities. However, there are some small establishments which are regularly engaged in some combination of finance, insurance, real estate, and law, no one of which is the principal activity. A separate major group (66) has been provided for such establishments.

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STANDARD INDUSTRIAL CLASSIFICATION

Major Group 60.—BANKING*The Major Group as a Whole*

This major group includes institutions which are engaged in deposit banking or closely related functions, including fiduciary activities.

Group No. Industry No.

601 FEDERAL RESERVE BANKS

Banks, the principal business of which is receiving deposits from banks of deposit and providing advances to such institutions, and which do not engage, except incidentally and on a small scale, in receiving deposits from or making advances to other enterprises or individuals.

6011 Federal Reserve Banks

The Federal Reserve banks and their branches, which serve as regional reserve and rediscount institutions for their member banks.

Federal Reserve banks

Federal Reserve branches

602**COMMERCIAL AND STOCK SAVINGS BANKS**

Banks and trust companies engaged in the business of accepting deposits from the public, except mutual savings banks. These establishments are also engaged in extending credit by means of loans and investments.

6022 State Banks, Members of the Federal Reserve System

State chartered banks and trust companies (accepting deposits), which are members of the Federal Reserve System. Deposits in these banks are insured by the Federal Deposit Insurance Corporation.

Commercial banks, State: members of Federal Reserve System
State banks (except mutual savings), members of Federal Reserve System
Stock savings banks, State: members of Federal Reserve System

Trust companies (with deposits), State: members of Federal Reserve System

6023 State Banks, Not Members of the Federal Reserve System, Insured by the Federal Deposit Insurance Corporation

State chartered banks and trust companies (accepting deposits), not members of the Federal Reserve System, the deposits of which are insured by the Federal Deposit Insurance Corporation.

Banks, private (unincorporated): insured
Commercial banks, State: insured—not members of Federal Reserve System
Industrial banks (accepting deposits), insured: not members of Federal Reserve System
State banks (except mutual savings), insured: not members of Federal Reserve System

Stock savings banks, State: insured—not members of Federal Reserve System
Trust companies (with deposits), State: insured—not members of Federal Reserve System

6024 State Banks, Not Members of the Federal Reserve System, Not Insured by the Federal Deposit Insurance Corporation

State chartered banks and trust companies (accepting deposits), not members of the Federal Reserve System, the deposits of which are not insured by the Federal Deposit Insurance Corporation.

Commercial banks, State: not insured—not members of Federal Reserve System
Industrial banks (accepting deposits), State: not insured
State banks (except mutual savings), not insured: not members of Federal Reserve System

Stock savings banks, State: not insured—not members of Federal Reserve System
Trust companies (with deposits), State: not members of Federal Reserve System

FINANCE, INSURANCE, AND REAL ESTATE

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Group
No. Industry
No.

COMMERCIAL AND STOCK SAVINGS BANKS—Continued**6025 National Banks, Members of the Federal Reserve System**

Banks (accepting deposits) chartered under the National Bank Act, members of the Federal Reserve System. Deposits in these banks are insured by the Federal Deposit Insurance Corporation.

National banks, members of Federal
Reserve System

Trust companies (with deposits),
national: members of Federal Re-
serve System

6026 National Banks, Not Members of the Federal Reserve System, Insured by the Federal Deposit Insurance Corporation

Banks (accepting deposits) chartered under the National Bank Act, not members of the Federal Reserve System, the deposits of which are insured by the Federal Deposit Insurance Corporation. These banks are located only in territories and possessions.

National banks, not members of Fed-
eral Reserve System: insured

Trust companies (with deposits),
national: insured—not members of
Federal Reserve System

6027 National Banks, Not Insured by the Federal Deposit Insurance Corporation

Banks (accepting deposits) chartered under the National Bank Act, not members of the Federal Reserve System, the deposits of which are not insured by the Federal Deposit Insurance Corporation. These banks are located in territories and possessions.

National banks, not insured

Trust companies (with deposits), na-
tional: not insured

6028 Unincorporated Private Banks, Not Insured by the Federal Deposit Insurance Corporation

Unincorporated private banks accepting deposits, not members of the Federal Reserve System, whose deposits are not insured by the Federal Deposit Insurance Corporation.

Unincorporated private banks, not
insured

603 MUTUAL SAVINGS BANKS

Savings banks operating on a mutual basis, without capital stock. They are located chiefly in the New England and Middle Atlantic States.

6032 Mutual Savings Banks, Members of the Federal Reserve System

State chartered mutual savings banks which are members of the Federal Reserve System. Deposits in these banks are insured by the Federal Deposit Insurance Corporation.

State mutual savings banks, members
of Federal Reserve System

6033 Mutual Savings Banks, Not Members of the Federal Reserve System, Insured by the Federal Deposit Insurance Corporation

State chartered mutual savings banks, not members of the Federal Reserve System, the deposits of which are insured by the Federal Deposit Insurance Corporation.

State mutual savings banks, insured:
not members of Federal Reserve
System

603

MUTUAL SAVINGS BANKS—Continued

6034 Mutual Savings Banks, Not Insured by the Federal Deposit Insurance Corporation

State chartered mutual savings banks not members of the Federal Reserve System, the deposits of which are not insured by the Federal Deposit Insurance Corporation.

State mutual savings banks, not insured

604

TRUST COMPANIES NOT ENGAGED IN DEPOSIT BANKING

Banks and trust companies engaged in fiduciary business, but not regularly engaged in deposit banking. Some of these establishments occasionally hold limited amounts of special types of deposits, and their uninvested trust funds are usually classified as deposits. This industry does not include establishments operating under trust company charters which limit their fiduciary business to that incidental to real estate title or mortgage loan activities (Industry 6361).

**6042 State Nondeposit Trust Companies, Members of the Federal Reserve System,
Insured and Not Insured**

State chartered nondeposit trust companies, which are members of the Federal Reserve System. Uninvested trust funds (and other funds regarded as deposits) may be insured by the Federal Deposit Insurance Corporation.

State nondeposit trust companies,
members Federal Reserve System, in-
sured or not insured

6044 State Nondeposit Trust Companies, Not Insured by the Federal Deposit Insurance Corporation

State chartered nondeposit trust companies, not members of the Federal Reserve System, the uninvested trust funds (and other funds regarded as deposits) of which are not insured by the Federal Deposit Insurance Corporation.

State nondeposit trust companies, not insured

605

ESTABLISHMENTS PERFORMING FUNCTIONS CLOSELY RELATED TO BANKING

6052 Foreign Exchange Establishments

Establishments primarily engaged in foreign exchange transactions, transmitting funds abroad, or financial operations for banks in other countries. This industry includes branches and agencies of foreign banks, except those engaged in accepting deposits from the general public in the United States, which are classified in Group 602.

**Foreign bank agencies, not in general
accepting U.S. deposits**

Foreign currency exchanges (purchasing and selling)

6054 Safe Deposit Companies

Establishments primarily engaged in the renting of safety deposit boxes and vault space for the safekeeping of valuables.

Safe deposit boxes

6055 Clearinghouse Associations

Associations primarily engaged in expediting the collection of local checks.

Bank clearinghouse associations
City clearinghouse associations

Clearinghouse associations, city or regional
Regional clearinghouse associations

FINANCE, INSURANCE, AND REAL ESTATE

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Group Industry
No. No.

**605 ESTABLISHMENTS PERFORMING FUNCTIONS CLOSELY RELATED TO
BANKING—Continued**

6056 Corporations for Banking Abroad

Establishments incorporated in the United States and engaged in international or foreign banking.

Establishments of corporations for
banking abroad

**6059 Establishments Performing Functions Closely Related to Deposit Banking, Not Else-
where Classified**

Establishments primarily engaged in performing functions closely related to deposit banking, not elsewhere classified.

Check cashing agencies
Escrows, other than real estate
Fiduciary agencies, other than real
estate or trust

Money order issuance
Tax certificate sale and redemption
agencies
Travelers' check issuance

Major Group 61.—CREDIT AGENCIES OTHER THAN BANKS*The Major Group as a Whole*

This major group includes establishments engaged in extending credit in the form of loans but not engaged in deposit banking.

Group Industry
No. No.

**611 REDISCOUNT AND FINANCING INSTITUTIONS FOR CREDIT AGENCIES
OTHER THAN BANKS**

**6112 Rediscount and Financing Institutions for Credit Agencies (Other Than Banks) Not
Primarily Associated With Agricultural Credit**

Establishments primarily engaged in rediscount and financing for credit agencies, other than banks, not primarily associated with agricultural credit.

Federal home loan banks
Mortgage associations: national, such
as GNMA, FNMA, FHA

Rediscounting and financing for non-
agricultural credit agencies, except
banks

**6113 Rediscount and Financing Institutions for Credit Agencies (Other Than Banks)
Primarily Associated With Agricultural Credit**

Establishments primarily engaged in rediscount and financing for credit agencies, other than banks, primarily associated with agricultural credit.

Federal Farm Mortgage Corporation

Federal intermediate credit banks
(agricultural credit)

612 SAVINGS AND LOAN ASSOCIATIONS

Savings and loan associations, building and loan associations, "cooperative banks" in Massachusetts, and "homestead associations" in Louisiana (home financing and thrift institutions).

6122 Federal Savings and Loan Associations

Savings and loan associations operated under Federal charters and supervision. These associations are members of the Federal Home Loan Bank System and their shares are insured by the Federal Savings and Loan Insurance Corporation.

Federal savings and loan associations

**6123 State Savings and Loan Associations, Insured by the Federal Savings and Loan
Insurance Corporation**

State chartered savings and loan associations, the shares of which are insured by the Federal Savings and Loan Insurance Corporation. Most of these associations are also members of the Federal Home Loan Bank System.

State annuity savings institutions, in-
sured

State savings and loan associations,
insured

**6124 State Savings and Loan Associations, Not Insured, Members of the Federal Home
Loan Bank System**

State chartered savings and loan associations, members of the Federal Home Loan Bank System, the shares of which are not insured by the Federal Savings and Loan Insurance Corporation.

State annuity savings institutions, not
insured: members of FHLB

State savings and loan associations,
not insured: members of FHLB

FINANCE, INSURANCE, AND REAL ESTATE

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Group
No. Industry
No.

612 SAVINGS AND LOAN ASSOCIATIONS—Continued

6125 State Savings and Loan Associations, Not Insured, Not Members of the Federal Home Loan Bank System

State chartered savings and loan associations, not members of the Federal Home Loan Bank System, the shares of which are not insured by the Federal Savings and Loan Insurance Corporation.

State annuity savings institutions, not insured: not members of FHLB

State savings and loan associations, not insured: not members of FHLB

613 AGRICULTURAL CREDIT INSTITUTIONS

6131 Agricultural Credit Institutions

Establishments primarily engaged in extending agricultural credit.

Agricultural loan companies
Banks for agricultural cooperatives
Commodity Credit Corporation
Credit institutions, agricultural
Farm mortgage companies

Farmers Home Administration
Federal land banks
Livestock loan companies
Production credit associations (agricultural)

614 PERSONAL CREDIT INSTITUTIONS

Establishments primarily engaged in extending credit to individuals.

6142 Federal Credit Unions

Cooperative thrift and loan associations organized under Federal charter to finance short-term credit needs of their members.

Federal credit unions

6143 State Credit Unions

Cooperative thrift and loan associations organized under State charter to finance short-term credit needs of their members.

State credit unions

6144 Industrial Loan Companies Not Engaged in Deposit Banking

Industrial loan companies not engaged in deposit banking (some of which may be called "banks").

"Banks", industrial loan: not engaged in deposit banking
Industrial loan companies, not engaged in deposit banking

Morris plan companies, not engaged in deposit banking

6145 Licensed Small Loan Lenders

Establishments primarily engaged in making small loans, license, regulated, and supervised under specific State statutes.

Loan (small) lenders, licensed

Personal finance companies (small loan, licensed)

6146 Installment Sales Finance Companies

Establishments primarily engaged in financing retail sales made on the installment plan. Some of these companies are also engaged in financing wholesale sales on the installment plan.

Acceptance corporations and dealers
Automobile loans (may include automobile insurance)

Financing of automobiles, airplanes, furniture, appliances, etc.
Installment sales finance, other than banks

6149 Miscellaneous Personal Credit Institutions

Establishments, not elsewhere classified, primarily engaged in providing loans to individuals.

Axias
Loan societies, remedial

Mutual benefit associations

615 BUSINESS CREDIT INSTITUTIONS

6153 Short-term Business Credit Institutions

Installment notes, buying of
Installment paper dealer
Mercantile financing
Purchasers of accounts receivable and
commercial paper
Trust deeds, purchase and sale of
Working capital financing

Machinery and equipment finance
leasing
Pari-mutuel totalizator equipment fi-
nance leasing and maintenance
Truck finance leasing

6162 Mortgage Bankers and Loan Correspondents

Mortgage brokers, using own money
Mortgage companies, urban

6163 Loan Brokers

Loan brokers
Mortgage brokers arranging for loans
but using money of others

FINANCE, INSURANCE, AND REAL ESTATE

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**Major Group 62.—SECURITY AND COMMODITY BROKERS,
DEALERS, EXCHANGES, AND SERVICES***The Major Group as a Whole*

This major group includes establishments engaged in the underwriting, purchase, sale, or brokerage of securities and other financial contracts on their own account or for the account of others; exchanges, exchange clearinghouses and other services allied with the exchange of securities and commodities.

Group Industry
No. No.

621 SECURITY BROKERS, DEALERS, AND FLOTATION COMPANIES**6211 Security Brokers, Dealers, and Flotation Companies**

Establishments primarily engaged in the purchase, sale, and brokerage of securities; and those, generally known as investment bankers, primarily engaged in originating, underwriting, and distributing issues of securities.

Bond dealers and brokers
Distributors, security
Floor traders, security
Investment bankers
Investment certificates, sale of
Investment firm—general brokerage
Managers or agents for mutual funds
Mineral leases, dealers in
Mineral royalties, dealers in
Mortgages, buying and selling (redis-
counting)
Mutual funds, selling by independent
salesmen

Note brokers
Oil and gas lease brokers
Oil royalties, dealers in
Sale of partnership shares in real es-
tate syndicates
Security brokers
Security dealers
Security flotation companies
Security traders
Security underwriters
Stock brokers and dealers
Tax certificate dealers

622 COMMODITY CONTRACTS BROKERS AND DEALERS**6221 Commodity Contracts Brokers and Dealers**

Establishments primarily engaged in buying and selling commodity contracts on either a spot or future basis for their own account or for the account of others. These establishments are members, or are associated with members, of recognized commodity exchanges. Such establishments do not take title or physically handle the commodity.

Commodity brokers (contracts)
Commodity dealers (contracts)
Floor traders, commodity contract

Futures, commodity brokers and
dealers
Traders, commodity contract

623 SECURITY AND COMMODITY EXCHANGES**6231 Security and Commodity Exchanges**

Establishments primarily engaged in furnishing space and other facilities to members for the purpose of buying, selling, or otherwise trading in stocks, bonds, or commodities.

Commodity exchanges
Security exchanges

Stock exchanges

628 SERVICES ALLIED WITH THE EXCHANGE OF SECURITIES OR COMMODITIES**6281 Services Allied With the Exchange of Securities or Commodities**

Establishments primarily engaged in furnishing services to security or commodity holders, brokers, or dealers.

Bondholders' protective committees
Custodians of securities
Exchange clearinghouses, commodity
Exchange clearinghouses, security
Financial advice and service, invest-
ment
Financial reporting
Investment advisory service

Investment counselors
Investment research
Protective committees, security hold-
ers'
Quotation service
Royalty owners protective associations
Security holders' protective committees
Stock transfer agents

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STANDARD INDUSTRIAL CLASSIFICATION

Major Group 63.—INSURANCE*The Major Group as a Whole*

This major group includes insurance carriers of all types. Agents and brokers dealing in insurance and organizations rendering services to insurance carriers or to policyholders are classified in Major Group 64.

Group Industry
No. No.

631 LIFE INSURANCE**6311 Life Insurance**

Establishments primarily engaged in underwriting life insurance, owned by stockholders, policyholders, or other carriers.

Assessment life insurance organiza-
tions
Benevolent insurance associations
Burial insurance societies
Cooperative life insurance organiza-
tions
Fraternal life insurance organizations

Fraternal protective associations
Funeral insurance
Legal reserve life insurance
Life insurance
Life insurance funds, savings bank
Life reinsurance

632 ACCIDENT AND HEALTH INSURANCE AND MEDICAL SERVICE PLANS**6321 Accident and Health Insurance**

Establishments primarily engaged in underwriting accident and health insurance, owned by stockholders, policyholders, or other carriers.

Accident and health insurance
Assessment associations, accident and
health insurance
Fraternal accident and health insur-
ance organizations

Hospitalization insurance
Mutual accident associations
Reciprocal inter-insurance exchanges,
accident and health insurance
Sick benefit associations, mutual

6324 Hospital and Medical Service Plans

Establishments primarily engaged in providing hospital, medical, and other health services to subscribers or members in return for specified subscription charges, providing these services for the most part through contracts with participating hospitals and physicians. Establishments providing these services through their own facilities or employed physicians are classified in Major Group 80.

Blue Cross plans
Blue Shield plans
Dental insurance (providing services by
contracts with health facilities)

Group Hospitalization plans
Hospital and medical service plans

633 FIRE, MARINE, AND CASUALTY INSURANCE**6331 Fire, Marine, and Casualty Insurance**

Establishments primarily engaged in underwriting fire, marine, and casualty insurance and reinsurance owned by stockholders, policyholders, or other carriers.

Agricultural (crop and livestock) in-
surance
Assessment associations: fire, marine,
and casualty insurance
Associated factory mutuals, fire and
marine insurance
Automobile insurance
Boiler insurance
Burglary and theft insurance
Federal Crop Insurance Corporation
Lloyd's organizations: fire, marine,
casualty insurance

Mutual fire, marine, and casualty in-
surance
Plate glass insurance
Property damage insurance
Reciprocal inter-insurance exchanges:
fire, marine, and casualty insurance
Reinsurance: fire, marine, and casualty
Stock fire, marine, and casualty insur-
ance
Workmen's compensation insurance

FINANCE, INSURANCE, AND REAL ESTATE

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Group Industry
No. No.**635 SURETY INSURANCE****6351 Surety Insurance**

Establishments primarily engaged in underwriting financial responsibility insurance.

Assessment associations, surety and
fidelity insurance
Bonding, fidelity or surety
Bonding of employees
Bonding, for guaranteeing job comple-
tion
Credit and other financial responsibil-
ity insurance

Fidelity insurance
Financial responsibility insurance
Insurance, fidelity
Insurance, surety
Liability insurance
Reciprocal inter-insurance exchanges,
surety and fidelity insurance
Surety insurance

636 TITLE INSURANCE**6361 Title Insurance**

Establishments primarily engaged in underwriting insurance to protect the owner of real estate, or lenders of money thereon, against loss sustained by reason of any defect of title.

Guaranty of titles
Mortgage insurance or guaranty

Real estate title insurance
Title insurance

637 PENSION, HEALTH, AND WELFARE FUNDS**6371 Pension, Health, and Welfare Funds**

Establishments primarily engaged in managing pension, retirement, health, and welfare funds.

Pension funds
Union trust funds

Union welfare, benefit, and health
funds
Welfare pensions

639 INSURANCE CARRIERS, NOT ELSEWHERE CLASSIFIED**6399 Insurance Carriers, Not Elsewhere Classified**

Establishments primarily engaged in underwriting insurance, not elsewhere classified, such as insuring bank deposits and shares in savings and loan associations.

Bank deposit insurance

Deposit or share insurance

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STANDARD INDUSTRIAL CLASSIFICATION

Major Group 64.—INSURANCE AGENTS, BROKERS, AND SERVICE*The Major Group as a Whole*

This major group includes agents and brokers dealing in insurance, and also organizations offering services to insurance companies and to policyholders.

Group Industry
No. No.

641 INSURANCE AGENTS, BROKERS, AND SERVICE**6411 Insurance Agents, Brokers, and Service**

Agents primarily representing one or more insurance carriers, or brokers not representing any particular carriers, primarily engaged as independent contractors in the sale or placement of insurance contracts with carriers, but not employees of the insurance carriers they represent. This industry also includes independent organizations concerned with insurance services.

Fire insurance underwriters' laboratories
Fire loss appraisal
Insurance adjusters
Insurance advisory services
Insurance agents
Insurance brokers
Insurance claim adjusters, not employed by insurance companies
Insurance educational services
Insurance information bureaus
Insurance inspection and investigation services
Insurance loss prevention services

Insurance patrol services
Insurance professional standards services
Insurance reporting services
Insurance research services
Insurance services
Life insurance agents
Medical insurance claims, processing of: contract or fee basis
Pension and retirement plan consultants
Policyholders' consulting service
Ratemaking organizations, insurance

FINANCE, INSURANCE, AND REAL ESTATE

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Major Group 65.—REAL ESTATE*The Major Group as a Whole*

This major group includes real estate operators, and owners and lessors of real property, as well as buyers, sellers, developers, agents, and brokers. Establishments primarily engaged in the construction of buildings for sale (operative builders) are classified in Industry 1531.

Group Industry
No. No.

651 REAL ESTATE OPERATORS (EXCEPT DEVELOPERS) AND LESSORS

Included in this group are real estate operators (except developers) and lessors. Lessees or lessors engaged in the development or improvement of unimproved real property are classified according to principal activity performed. This group includes operators of apartment hotels and residential mobile home sites, but does not include hotels, rooming houses, camps, travel trailer parks, and other lodging places for transients which are classified in Major Group 70. "Operators" in this group will be interpreted as owner-operators. Establishments primarily engaged in renting, buying, selling, managing, and appraising real estate for others are classified in Industry 6531.

6512 Operators of Nonresidential Buildings

Establishments primarily engaged in the operation of nonresidential buildings.

Bank buildings, operation of
Insurance buildings, operation of
Lessors of piers, docks, and associated
buildings and facilities
Operators of commercial and industrial
buildings
Operators of nonresidential buildings

Retail establishments, property opera-
tion only
Shopping centers, property operation
only
Theater buildings: (ownership and
operation)

6513 Operators of Apartment Buildings

Establishments primarily engaged in the operation of apartment buildings. Apartment buildings are defined as containing five or more housing units. This industry does not include hotels, rooming houses, camps, and other lodging places for transients which are classified in Major Group 70.

Hotels, residential: operators
Operation of retirement hotels
Operators of apartment buildings (five
or more housing units)

Operators of apartment hotels
Operators of residential hotels

6514 Operators of Dwellings Other Than Apartment Buildings

Establishments primarily engaged in the operation of dwellings other than apartment buildings. Dwellings other than apartment buildings are defined as containing four or fewer housing units. This industry does not include hotels, rooming houses, camps, and other lodging places for transients which are classified in Major Group 70.

Operators of residential buildings
(four or fewer housing units)

Operators of dwellings (four or fewer
housing units)

6515 Operators of Residential Mobile Home Sites

Establishments primarily engaged in the operation of residential mobile home sites. Establishments primarily engaged in the operation of sites for overnight or transient use for travel trailers are classified in Industry 7098.

Operators of mobile home sites

6517 Lessors of Railroad Property

Establishments primarily engaged in leasing railroad property.

Lessors of railroad property

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STANDARD INDUSTRIAL CLASSIFICATION

Group No.	Industry No.	
651		REAL ESTATE OPERATORS (EXCEPT DEVELOPERS) AND LESSORS—Con.
6519		Lessors of Real Property, Not Elsewhere Classified
		Establishments primarily engaged in leasing real property, not elsewhere classified.
		Airport leasing, if not operating airport
		Lessors of property, except railroad buildings, or mobile home sites
653		REAL ESTATE AGENTS AND MANAGERS
6531		Real Estate Agents and Managers
		Establishments primarily engaged in renting, buying, selling, managing, and appraising real estate for others.
		Appraisers, real estate
		Brokers, real estate
		Buying agents, real estate
		Cemetery management service
		Escrow agents, real estate
		Fiduciaries, real estate
		Managers, real estate
		Real estate agents, brokers, and managers
		Real estate auctions
		Rental agents for real estate
		Selling agents for real estate
654		TITLE ABSTRACT OFFICES
6541		Title Abstract Offices
		Establishments primarily engaged in searching real estate titles. This industry does not include title insurance companies which are classified in Industry 6361.
		Title abstract companies
		Title and trust companies
		Title reconveyance companies
		Title search companies
655		SUBDIVIDERS AND DEVELOPERS
6552		Subdividers and Developers, Except Cemeteries
		Establishments primarily engaged in subdividing real property into lots, except cemetery lots, and in developing it for resale on their own account or for others.
		Real property subdividers and developers, except of cemetery lots
6553		Cemetery Subdividers and Developers
		Establishments primarily engaged in subdividing real property into cemetery lots, and in developing it for resale on their own account or for others.
		Animal cemetery operation
		Cemeteries—real estate operation
		Cemetery associations
		Mausoleum operation
		Real property subdividers and developers, cemetery lots only

FINANCE, INSURANCE, AND REAL ESTATE

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**Major Group 66.—COMBINATIONS OF REAL ESTATE,
INSURANCE, LOANS, LAW OFFICES***The Major Group as a Whole*

This major group includes establishments not classifiable on the basis of predominant nature of business, generally small in size, which are regularly engaged in any combination of real estate, insurance, loans, or the practice of law. However, if any one of these activities constitutes the principal business, the establishment should not be classified in this major group, but should be classified in the industry provided for that activity.

Group Industry
No. No.

661 COMBINATIONS OF REAL ESTATE, INSURANCE, LOANS, LAW OFFICES

6611 Combinations of Real Estate, Insurance, Loans, Law Offices

Combinations of real estate, insurance,
loans, and law offices

Estate planning, real estate and insur-
ance

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STANDARD INDUSTRIAL CLASSIFICATION

Major Group 67.—HOLDING AND OTHER INVESTMENT OFFICES*The Major Group as a Whole*

This major group includes investment trusts, investment companies, holding companies, and commodity trading companies.

Group Industry
No. No.

671 HOLDING OFFICES**6711 Holding Offices**

Establishments primarily engaged in holding or owning securities for the purpose of exercising some degree of control over the activities of the companies whose securities they hold. Holding companies which own subsidiary companies, and supply buying, accounting, and management services but perform no operating functions are included in this industry. Companies holding securities but which are predominantly operating companies are classified according to the kind of business operated.

Bank holding companies
Holding companies
Investment holding companies

Personal holding companies
Public utility holding companies

672 INVESTMENT OFFICES

All types of investment trusts and companies, comprising management investment companies, unit investment trusts, and face-amount certificate companies.

6722 Management Investment Offices, Open-end

Establishments primarily engaged in issuing shares, other than unit investment trusts and face-amount certificate companies, whose shares contain a provision requiring redemption by the company upon request of the security holder.

Management investment funds, open-end

Mutual fund sales on own account

6723 Management Investment Offices, Closed-end

Establishments primarily engaged in issuing shares, other than unit investment trusts and face-amount certificate companies, whose shares contain no provision requiring redemption by the company upon request of the security holder.

Management investment funds, closed-end

6724 Unit Investment Trusts

Establishments primarily engaged in issuing unit investment trusts. These investment companies (1) are organized under a trust indenture, contract of custodianship or agency, or similar instrument, (2) do not have a board of directors, and (3) issue only securities redeemable at the request of the security holder, each of which represents an undivided interest in a unit of specified securities; but does not include voting trusts.

Investors' syndicates

Unit investment trusts

6725 Face-amount Certificate Offices

Establishments primarily engaged in issuing face-amount certificates, sometimes referred to as guaranteed face-amount certificates, which are essentially obligations of the issuing company to pay a fixed sum at a specified maturity date and usually require periodic payments by the purchaser.

Face-amount certificate issuing

Issuing of face-amount installment certificates

FINANCE, INSURANCE, AND REAL ESTATE

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Group Industry
No. No.

673 TRUSTS

Establishments primarily engaged in the management of the funds of individual trusts and foundations. Trusts and funds which are predominantly operating establishments are classified according to the kind of business operated.

6733 Educational, Religious, and Charitable Trusts

Establishments primarily engaged in the management of the funds of trusts and foundations organized for religious, educational, charitable, or nonprofit research purposes.

Charitable trusts, management of
Educational trusts, management of

Religious trusts, management of

6733 Trusts, Except Educational, Religious, and Charitable

Establishments primarily engaged in the management of the funds of trusts and foundations organized for purposes other than religious, educational, charitable, or nonprofit research.

Administrators of private estates (non-
operating)
Personal investment trusts, manage-
ment

Trustees, except for educational, reli-
gious or charitable trusts
Trusts except educational, religious,
and charitable: management of
vacation funds for employees

679 MISCELLANEOUS INVESTING

6792 Oil Royalty Traders

Establishments primarily engaged in investing in oil and gas royalties or leases, or fractional interest therein.

Oil leases, buying and selling on own
account

Oil royalty companies

6793 Commodity Traders

Establishments primarily engaged in investing in futures contracts and occasionally in actual commodities or warehouse receipts. These companies are not members of commodity exchanges.

Commodity trading companies

6794 Patent Owners and Lessors

Establishments primarily engaged in owning or leasing patents and copyrights which they in turn license others to use in return for royalty payments.

Copyright buying and licensing
Franchises, selling or licensing
Music licensing to radio stations
Music royalties, sheet and record

Patent buying and licensing
Patent leasing
Performance rights, publishing and
licensing of

6799 Investors, Not Elsewhere Classified

Establishments primarily engaged in investing, not elsewhere classified.

Investment clubs
Security speculators for own account

Tax liens: holding, and buying and
selling

Division I Services

The Division as a Whole

This division includes establishments primarily engaged in providing a wide variety of services for individuals, business and government establishments, and other organizations. Hotels and other lodging places; establishments providing personal, business, repair, and amusement services; health, legal, engineering, and other professional services; educational institutions; membership organizations, and other miscellaneous services, are included.

Establishments which provide specialized services closely allied to agriculture, mining, transportation, etc., are classified in their respective divisions.

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STANDARD INDUSTRIAL CLASSIFICATION

**Major Group 70.—HOTELS, ROOMING HOUSES, CAMPS,
AND OTHER LODGING PLACES***The Major Group as a Whole*

This major group includes commercial and institutional establishments engaged in furnishing lodging, or lodging and meals, and camping space and camping facilities, on a fee basis.

Group Industry
No. No.

701 HOTELS, MOTELS, AND TOURIST COURTS**7011 Hotels, Motels, and Tourist Courts**

Commercial establishments, known to the public as hotels, motor-hotels, motels, or tourist courts, primarily engaged in providing lodging, or lodging and meals, for the general public. Resort hotels and hotels operated by membership organizations, and open to the general public, are included. Apartment hotels are classified in Industry 6513; rooming and boarding houses in Industry 7021; and sporting and recreational camps in Industry 7032.

Auto courts
Cabins and cottages
Camps, tourist
Hotels, except residential
Inns, furnishing food and lodging
Motels
Recreational hotels
Seasonal hotels
Ski lodges and resorts

Summer resort hotels
Tourist cabins
Tourist courts
Winter resort hotels
YMCA and YMHA hotels, open to the general public
YWCA and YWHA hotels, open to general public

702 ROOMING AND BOARDING HOUSES**7021 Rooming and Boarding Houses**

Establishments renting rooms, with or without board, on a fee basis to permanent or transient guests. Homes for the aged, for children, and for the handicapped that provide additional services, other than nursing care, are classified in Industry 8361 and homes that provide nursing care in Group 805.

Boarding houses, except organization
Dormitories, commercially operated
Lodging houses, except organization

Rental of furnished rooms
Rooming houses, except organization

703 CAMPS AND TRAILERING PARKS**7032 Sporting and Recreational Camps**

Commercially operated sporting and recreational camps, such as boys' and girls' camps, and fishing and hunting camps. Establishments operating day camps are classified in Industry 7999. Resort hotels are classified in Industry 7011.

Boys' camps
Cabin camps
Camps, sporting and recreational
Dude ranches, except hotel

Fishing camps
Girls' camps
Hunting camps
Nudist camps

7033 Trailering Parks and Camp Sites for Transients

Establishments primarily engaged in providing overnight or short-term sites for trailers, campers, or tents, with or without utilities such as water and electricity. Establishments primarily operating residential trailer parks are classified in Industry 6515.

Camp sites for transients
Campgrounds

Trailering parks and camp sites for transients

SERVICES

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Group No.	Industry No.
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704

ORGANIZATION HOTELS AND LODGING HOUSES, ON MEMBERSHIP BASIS**7041 Organization Hotels and Lodging Houses, on Membership Basis**

Lodging houses and hotels operated by membership organizations for the benefit of their constituents, and not open to the general public. Commercial hotels operated by such organizations are classified in Group 701. Resident homes for the aged and retarded are classified in Industry 8861.

Boarding houses, fraternity and soror-
ity

Boarding houses, organization

Fraternity residential houses

Hotels, organization

Lodging houses, organization

Residence clubs, organization

Rooming houses, fraternity and soror-
ity

Rooming houses, organization

Sorority residential houses

The Major Group as a Whole

Group No.	Industry No.
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7211 Power Laundries, Family and Commercial

Laundry collecting and distributing outlets, operated by power laundries

Power laundries, family and commercial

Establishments primarily engaged in providing laundry and dry cleaning services but which have the laundry and dry cleaning work done by others. Establishments in this classification may do their own pressing or finish work. Establishments operating their own laundry plants are classified in Industry 7211; and those operating their own dry cleaning plants in Industry 7213.

Agent, retail: for laundries and dry cleaners
Bottlers, laundry and dry cleaning
Cleaning and laundry pickup stations,
not owned by laundries or cleaners

Press shops (for garments)
Truck route laundry and dry cleaning,
not operated by laundry or cleaners
Valet service

Establishments primarily engaged in supplying to commercial establishments or household users, on a rental basis, such laundered items as uniforms, gowns, and coats of the type used by doctors, nurses, barbers, beauticians, waitresses, etc.; and table linens, bed linens, towels and toweling, and similar items. Establishments included in this industry may or may not operate their own laundry facilities. Diaper and infant wear services are classified in Industry 7214.

Apron supply service
Coat supply service
Linen supply service

Shirt supply service
Table cover supply service
Towel supply service

Establishments primarily engaged in supplying diapers (including disposable) and other baby linens to homes, usually on a contract basis. Such establishments may or may not operate their own laundry facilities.

Diaper service

Infant wear service

Establishments primarily engaged in the operation of coin-operated or similar self-service laundry and dry cleaning equipment for use on the premises, or in apartments, dormitories and similar locations.

Coin-operated laundries
Dry cleaning, coin-operated
Launderettes

Laundromats
Laundry machine routes, coin-operated
Self-service laundry and dry cleaning

SERVICES

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Group Industry
No. No.**721 LAUNDRY, CLEANING, AND GARMENT SERVICES—Continued****7216 Dry Cleaning Plants, Except Rug Cleaning**

Plants primarily engaged in dry cleaning or dyeing apparel and household fabrics other than rugs (Industry 7217). Press shops and agents for dry cleaners are classified in Industry 7212. Establishments dyeing fabrics for the trade are classified in Major Group 22.

Cleaning and dyeing plants, except rug
cleaning
Collecting and distributing agencies,
operated by cleaning plants

Drapery dry cleaning plants
Dry cleaning plants, except rug clean-
ing

7217 Carpet and Upholstery Cleaning

Establishments primarily engaged in cleaning carpets and upholstered furniture at a plant or on customers' premises. Establishments primarily engaged in rug repairing are classified in Industry 7600; and those primarily engaged in reupholstery and furniture repair in Industry 7641.

Carpet cleaning and repairing plants
Carpet cleaning on customers' premises
Furniture cleaning on customers' prem-
ises

Rug cleaning, dyeing, and repairing
plants
Upholstery cleaning on customers'
premises

7218 Industrial Launderers

Establishments primarily engaged in supplying laundered or dry cleaned work uniforms; laundered wiping towels; safety equipment (gloves, flame resistant clothing, etc.); dust control items, such as treated mats or rugs, mops, dust tool covers and cloths; and other selected items to industrial or commercial users. These items may belong to the industrial launderers and be supplied to users on a rental basis, or they may be the customer's own goods. Establishments included in this industry may or may not operate their own laundry or dry cleaning facilities.

Flame resistant clothing supply service
Industrial launderers
Industrial uniform supply service
Launderers, industrial
Safety glove supply service

Treated mats, rugs, mops, dust tool
covers and cloths supply service
Wiping towel supply service
Work clothing supply service

7219 Laundry and Garment Services, Not Elsewhere Classified

Establishments primarily engaged in furnishing other laundry services, including repairing, altering, and storing clothes for individuals; and the operation of Chinese, French, and other hand laundries. Custom tailors are classified in Industry 5600; fur shops making fur apparel to custom order in Industry 5681; and press shops in Industry 7212.

Chinese hand laundries
Clothing alteration and repair shops
French hand laundries
Fur garments: cleaning, repairing, and
storage
Garment alteration and repair shops
Glove mending for individuals
Hand laundries

Hosiery repair service
Laundries, except power and coin-
operated
Pillow cleaning and renovating
Reweaving textiles (mending service)
Tailor shops, except custom or mer-
chant tailors
Weaving textiles (mending service)

722**PHOTOGRAPHIC STUDIOS, PORTRAIT****7231 Photographic Studios, Portrait**

Establishments primarily engaged in portrait photography for the general public. Establishments primarily engaged in commercial photography are classified in Industry 7333; those primarily engaged in film developing or print processing for the trade or for the general public are classified in Industry 7395; and those engaged in motion picture film processing in Industry 7819.

Home photographers
Passport photographers
Portrait photographers

School photographers
Transient photographers

STANDARD INDUSTRIAL CLASSIFICATION

Group No.	Industry No.	
723		BEAUTY SHOPS
	7231	Beauty Shops
		Establishments primarily engaged in furnishing beauty services. This industry also includes combination beauty and barber shops.
		Beauty and barber shops, combined Beauty culture schools
		Beauty shops Hairdressers
724		BARBER SHOPS
	7241	Barber Shops
		Establishments primarily engaged in furnishing barber and men's hair styling services.
		Barber colleges Barber shops
		Hair stylists, men's
725		SHOE REPAIR SHOPS, SHOE SHINE PARLORS, AND HAT CLEANING SHOPS
	7251	Shoe Repair Shops, Shoe Shine Parlors, and Hat Cleaning Shops
		Establishments primarily engaged in repairing footwear, shining shoes, and cleaning and blocking hats.
		Bootblack parlors Hat cleaning and blocking shops Shoe dyeing shops
		Shoe repair shops Shoe shine parlors
726		FUNERAL SERVICE AND CREMATORIES
	7261	Funeral Service and Crematories
		Establishments primarily engaged in preparing the dead for burial, conducting funerals, and cremating the dead.
		Crematories Funeral directors Funeral homes or parlors
		Morticians Undertakers
729		MISCELLANEOUS PERSONAL SERVICES
	7299	Miscellaneous Personal Services
		Establishments primarily engaged in providing personal services, not elsewhere classified, such as steam baths, reducing salons and health clubs, clothing rental, locker rental, and porter service. The rental of cold storage lockers is classified in Industry 4222.
		Babysitting bureaus Beauty spas Birth certificate agencies Car title and tag service to individuals Check room concessions or services Clothing rental Coin-operated service machine operation: scales, shoe shine, lockers College clearinghouses Comfort station operation Costume rental Dating service Debt counseling or adjustment service to individuals Dress suit rental Dressmaking service on material owned by individual customers Escort service Genealogical investigation service Health clubs or spas Invalid supplies rental Locker rental, except cold storage Marriage bureaus
		Massage parlors Pillow rental service Porter service Portrait copying Quilting for individuals Reducing salons Rental of items for personal use by individuals, except for recreation Rest room operation Scalp treatment service Seamstresses Shopping service Slenderizing salons Spas, health: except resort with lodging Steam baths Stitching, on a custom basis Tattoo parlors Tax return preparation service Turkish baths Valet parking Wardrobe service, except theatrical Wedding chapels, privately operated

SERVICES

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Major Group 73.—BUSINESS SERVICES*The Major Group as a Whole*

This major group includes establishments primarily engaged in rendering services, not elsewhere classified, to business establishments on a fee or contract basis, such as advertising, mailing services; building maintenance services; employment service; management and consulting services; protective services; equipment rental and leasing (except finance leasing); commercial research, development and testing; photofinishing; and personnel supply services. Establishments which provide specialized services closely allied to agriculture, mining, transportation, etc., are classified in their respective divisions.

Group Industry
No. No.

731 ADVERTISING**7311 Advertising Agencies**

Establishments primarily engaged in preparing advertising (writing copy, art work, graphics, and other creative work) and placing such advertising in periodicals, newspapers, radio and television, or other advertising media for clients on a commission or fee basis. Establishments which place advertising with media, but which perform no creative services (media buying service), are classified in Industry 7319; those which write advertising copy, but do not place the advertising with media, are classified in Industry 8999; those which provide services in commercial art and graphics, or other creative advertising services, but do not place the advertising with media, are classified in Industry 7338.

Advertising consultants (agencies)

7312 Outdoor Advertising Services

Establishments primarily engaged in the preparation of poster displays and painted and electric spectacular displays on panels, bulletins, and frames, principally outdoors. Such establishments may construct, repair, and maintain display boards and may post advertisements. Special trade contractors primarily engaged in erecting display boards are classified in Major Group 17. Establishments primarily engaged in manufacturing electrical, mechanical or plate signs and advertising displays are classified in Industry 8998.

Billboard advertising
Outdoor advertising service

Poster advertising service, outdoor

7313 Radio, Television, and Publishers' Advertising Representatives

Establishments primarily engaged in soliciting advertising on a fee basis for newspapers, magazines, and other publications, or for radio and television stations. Separate offices of newspapers, magazines, and radio and television stations engaged in soliciting advertising are classified as auxiliaries.

Newspaper advertising representatives
(not auxiliary to publishing)

Radio representatives, advertising
Television and radio time, sale of

7319 Advertising, Not Elsewhere Classified

Establishments primarily engaged in furnishing advertising services, not elsewhere classified, such as aerial advertising, circular and handbill distribution, distribution or delivery of advertising material or samples, transit advertising, etc. Establishments primarily engaged in direct mail advertising are classified in Industry 7331. Those which write advertising copy, but do not place the advertising with media, are classified in Industry 8999; and those which provide services in commercial art, graphics, or other creative advertising services, but do not place the advertising with media, in Industry 7338.

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

731 ADVERTISING—Continued

7319 Advertising, Not Elsewhere Classified—Continued

Aerial advertising
Bus card advertising
Car carding service
Circular distributing service
Coupon distribution
Display advertising service, except out-
door
Handbill distribution service

Poster advertising services, except out-
door
Samples, distribution of
Shopping news, advertising and dis-
tributing service
Sky writing
Transit advertising

732 CONSUMER CREDIT REPORTING AGENCIES, MERCANTILE REPORTING AGENCIES, AND ADJUSTMENT AND COLLECTION AGENCIES

7321 Consumer Credit Reporting Agencies, Mercantile Reporting Agencies, and Adjustment and Collection Agencies

Establishments primarily engaged in mercantile and consumer credit reporting or the collection or adjustment of claims. Establishments primarily engaged in providing credit card service with collection by a central agency are classified in Industry 6153; and those engaged in conducting personal investigations for insurance and other firms, in Industry 7399. Insurance adjustment agencies are classified in Industry 6411, and credit counseling or "adjustment" service to individuals in Industry 7299.

Adjustment bureaus, except insurance
adjustment agencies
Collection agencies (accounts), except
for real estate

Consumer credit reporting bureaus
Credit bureaus and agencies
Credit clearinghouses
Mercantile credit reporting bureaus

733 MAILING, REPRODUCTION, COMMERCIAL ART AND PHOTOGRAPHY, AND STENOGRAPHIC SERVICES

7331 Direct Mail Advertising Services

Establishments primarily engaged in furnishing services for direct mail advertising, such as creating, producing, and mailing of "direct mail advertising." This industry also includes establishments primarily engaged in compiling and selling mailing lists. Establishments primarily engaged in reproducing direct mail copy on order, but performing none of the other direct mail advertising services, are classified in Group 275 if they print the copy; in Industry 7332, if they duplicate the copy by blueprinting or photocopying; and in Industry 7339, if they duplicate the copy by other methods.

Address list compilers
Addressing service
Addressographing service
Direct mail advertising service

Mail advertising service
Mailing list compilers
Mailing service

7332 Blueprinting and Photocopying Services

Establishments primarily engaged in reproducing drawings, plans, maps, or other copy, by blueprinting or photocopying.

Blueprinting service

Photocopying service

7333 Commercial Photography, Art, and Graphics

Establishments primarily engaged in performing graphics, commercial art, or commercial photography services for advertising agencies, publishers, and other business and industrial users. Establishments primarily engaged in portrait photography are classified in Industry 7221; art, except commercial, is classified in Industry 8000.

Aerial photographic service, except
mapmaking
Chart and graph design
Commercial art and illustration
Commercial photography
Creative services to advertising indus-
try, except writers

Film strips and slides
Graphic arts and related design
Photographic studios, commercial
Silk screen design
Slide film producers
Still and slide film producers

SERVICES

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Group Industry
No. No.**733 MAILING, REPRODUCTION, COMMERCIAL ART AND PHOTOGRAPHY, AND
STENOGRAPHIC SERVICES—Continued****7339 Stenographic Services; and Reproduction Services, Not Elsewhere Classified**

Establishments primarily engaged in furnishing stenographic services; and reproduction services other than printing (Major Group 27), blueprinting and photocopying (Industry 7332), and reproduction in connection with direct mail advertising (Industry 7331).

Court reporting service
Duplicating services: except printing,
blueprinting, and photocopying
Letter writing service
Mimeographing service

Multigraphing service
Multilithing service
Public stenographers
Stenographic service
Typing service

734

SERVICES TO DWELLINGS AND OTHER BUILDINGS**7341 Window Cleaning**

Establishments primarily engaged in cleaning windows in dwellings or other buildings.

Window cleaning service

7342 Disinfecting and Exterminating Services

Establishments primarily engaged in disinfecting dwellings and other buildings, and in exterminating insects, rodents, and other pests.

Bird proofing
Deodorant servicing of rest rooms
Disinfecting service
Exterminating service
Fumigating service

Pest control in structures
Rest room cleaning service
Termite control
Washroom sanitation service

7349 Cleaning and Maintenance Services to Dwellings and Other Buildings, Not Elsewhere Classified

Establishments primarily engaged in furnishing, to dwellings and other buildings, cleaning and maintenance services, not elsewhere classified, such as janitorial service, floor waxing, and office cleaning. General contractors and special trade contractors primarily engaged in building repair work are classified in Division C.

Building cleaning service, interior
Chimney cleaning service
Custodians of schools, on a contract basis
Floor waxing service
Hospital housekeeping (cleaning service), on a contract basis
Janitorial services, on a contract basis
Lighting maintenance service (bulb and fuse replacement and cleaning)

Maintenance, building: except repairs
Office cleaning or charring service
Service station cleaning and degreasing service
Telephone booths, cleaning and maintenance of
Venetian blind cleaning, including work done on owners' premises

735

NEWS SYNDICATES**7351 News Syndicates**

Establishments primarily engaged in furnishing news, pictures, features, etc., and in supplying news reporting services to newspapers and periodicals. Both nonprofit (membership) and commercial (nonmembership) news syndicates are included. Separate establishments of newspaper and periodical publishers which are engaged in gathering news are classified as auxiliaries.

News correspondents, independent
News feature syndicates
News pictures, gathering and distributing
News reporting services for newspapers and periodicals

News syndicates
News ticker service
Press services (news syndicate)

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STANDARD INDUSTRIAL CLASSIFICATION

Group
No. Industry
No.**736 PERSONNEL SUPPLY SERVICES****7361 Employment Agencies**

Establishments primarily engaged in providing employment service, except theatrical employment agencies (Industry 7922) and motion picture casting bureaus (Industry 7819). Establishments classified here may assist either employers or those seeking employment. Establishments engaged in supplying the services of their own employees to work in the establishments of others are classified in Industry 7362 (temporary help) or Industry 7369 (continuing personnel supply).

Chauffeur registries
Employment agencies, except theatrical
and motion picture
Executive placing services
Labor contractors (employment agen-
cies), except farm labor

Maid registries
Model registries
Nurses' registries
Ship crew agencies
Teachers' agencies

7362 Temporary Help Supply Services

Establishments primarily engaged in supplying temporary help, except agricultural (Industry 0761), on a contract basis to other businesses. The help supplied is under the direct or general supervision of the business to whom the help is furnished; however, the help is always on the payroll of the supplying establishment.

Fashion show service (supply of models
only)
Labor pools
Manpower pools

Modelling service
Temporary help service
Usher service

7369 Personnel Supply Services, Not Elsewhere Classified

Establishments, not elsewhere classified, which provide the personnel to perform a range of services in operating specified facilities, or which provide a number of different continuing services on a contract or fee basis, within another business (or government) establishment or installation. Establishments primarily providing one specialized service, such as janitorial service (Industry 7349) or guard service (Industry 7393), are classified in the specialized industry. Establishments which provide management service only, except agricultural (Industry 0762), are classified in Industry 7392. Establishments which provide both management and staff to operate a business are classified according to the type of activity of the business.

Base maintenance (providing personnel
on continuing basis)

Facilities management, except com-
puters

737

COMPUTER AND DATA PROCESSING SERVICES**7372 Computer Programming and Other Software Services**

Establishments primarily engaged in providing services in computer programming, systems design and analysis, and other computer "software".

Computer systems analysis and design
Development of computer programs or
systems (software)

Programming services, computer
Systems engineering, computer related

7374 Data Processing Services

Establishments primarily engaged in providing data processing services to others. Service may consist of complete processing and preparation of reports from data supplied by the customer or may be a specialized service such as key punching or making data processing equipment available to others on an hourly or time-sharing basis. Also included are establishments primarily engaged in the management and operation of the computer and data processing facilities of others on a continuing basis.

Calculating service (computer)
Computer management contracting
Computer time sharing
Data processing service
Data punch service
Facilities management, computer

Key punch service
Leasing of computer time
Rental of computer time
Service bureaus, computer
Tabulating service

SERVICES

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Group Industry
No. No.

737

COMPUTER AND DATA PROCESSING SERVICES—Continued**7379 Computer Related Services, Not Elsewhere Classified**

Establishments primarily engaged in supplying computer and data processing services, not elsewhere classified, such as rental, leasing, repair and maintenance of computers and related equipment. Computer consultants operating on a fee basis are classified here. Leasing of computer and related equipment directly by the manufacturer is classified in Manufacturing; if leasing is done directly by sales offices of the manufacturer, the establishment is classified as Wholesale Trade. Establishments primarily engaged in finance (equity) leasing of computers and related equipment are classified in Industry 6159.

Computer and data processing equipment repair and maintenance
Computer brokers (operating on fee basis)
Computer consultants

Leasing of computers, except finance leasing or by the manufacturer
Rental of computers, except finance leasing or by the manufacturer
Tape recertification service

739

MISCELLANEOUS BUSINESS SERVICES**7391 Research and Development Laboratories**

Establishments primarily engaged in laboratory or other physical research and development on a contract or fee basis. Nonprofit research agencies funded by investments, grants or contributions are classified in Industry 8022. Establishments engaged in economic, educational, operations, systems, or other nonphysical research on a contract or fee basis are classified in Industry 7372 or Industry 7392. Research and development laboratories of companies which manufacture the products developed from their research activities are classified as auxiliary to the manufacturing establishments served.

Agricultural research, commercial
Chemical laboratories, except testing (not manufacturing auxiliaries)
Development of computer and related technology (hardware)
Engineering laboratories, except testing (not manufacturing auxiliaries)
Food research (not manufacturing auxiliaries)

Industrial laboratories, except testing (not manufacturing auxiliaries)
Physical (laboratory) research and development
Research and development laboratories (not manufacturing auxiliaries)
Research laboratories, commercial

7392 Management, Consulting, and Public Relations Services

Establishments primarily engaged in furnishing a wide variety of general or specialized management, consulting, or public relations services on a contract or fee basis. Management engineering is classified here; however, professional design and related consulting engineering is classified in Group 891. Management and operation of a business, where operating staff, as well as management, is provided—for example, hotel management and operation—is classified in the industry of the establishment managed. Establishments furnishing computer related services are classified in Group 737.

Business analysts
Business consultants
Business economists
Business research service
Business, management, and training consulting service
Circuit management service for motion picture theaters
City planners (except professional engineering)
Consulting service, except computer related or professional engineering
Corporation organizers
Economic research
Efficiency experts
Financial management service to business

Industrial development planning service, commercial
Industrial management service
Lobbyists
Management consulting service
Management engineering
Management service (operating staff not furnished)
Market analysis or research
Merchandising counsels
Merger, acquisition and reorganization studies
Motel management service, commercial—nonoperating
Operations research, except computer systems design
Opinion research

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

739

MISCELLANEOUS BUSINESS SERVICES—Continued

7392 Management, Consulting, and Public Relations Services—Continued

Personnel management service
Personnel training and consulting
Planning consultants
Programmed instruction service
Promotion service (business service)
Public relations service
Radio consultants
Reorganization service (business)
Research, except laboratory research
(not manufacturing auxiliaries)
Sales advisory service
Sales promotion (not involving sales of
merchandise)

Site locators
Surveys, for location of business estab-
lishments
Systems engineering, not primarily
computer related
Systems research and development, not
primarily computer related
Testing service, educational or person-
nel
Traffic consultants

7393 Detective Agencies and Protective Services

Establishments primarily engaged in providing personnel for detective, investigative, patrolling, night watching, or personal protection services. Establishments primarily engaged in maintenance and monitoring of mechanical protective devices, such as burglar and fire alarm systems, are classified here, but the installation of such devices is classified in Industry 1781.

Armored car services
Burglar alarm maintenance and moni-
toring
Burglary protection service
Detective agencies
Dogs, rental of: for protective service
Fingerprint service

Fire alarm maintenance and monitoring
Investigators, private
Lie detection service
Protective devices, mechanical: opera-
tion and maintenance
Protective services
Watching service, private

7394 Equipment Rental and Leasing Services

Establishments primarily engaged in renting or leasing (except finance leasing) machinery, tools and other equipment, including heavy construction and earth moving equipment. Establishments primarily engaged in finance leasing are classified in Industry 6159. Establishments renting and leasing automobiles and trucks without drivers are classified in Group 751; those renting automobiles with drivers in Industry 4119, trucks with drivers in Group 421; those renting personal items such as lockers (other than refrigerated), clothes, and pillows in Industry 7299; those renting amusement and recreation items such as bicycles, canoes, and beach chairs and accessories in Industry 7999; and those renting commercial boats in Industry 4469. Establishments producing machinery and equipment (including computers and other data processing equipment) which lease or sell their products are classified in Manufacturing. Manufacturers' sales branches or offices leasing or selling the machinery and equipment of their manufacturing plants are classified in Wholesale Trade. Establishments primarily leasing computer time, including time sharing services, are classified in Industry 7374; those renting or leasing computers or data processing equipment in Industry 7870.

Airplane rental
Appliance rental
Coin-operated machine rental
Construction equipment rental
Electronic equipment rental and serv-
ice, except computers
Equipment rental and leasing
Furniture rental
Leasing of equipment, except automo-
tive and computer related

Oil field equipment rental
Oil well drilling equipment rental:
machinery, drilling bits, etc.
Party supplies rental
Piano rental
Rental of dishes, silverware, tables, and
banquet accessories
Toilet (portable) rental
Tool rental
Vending machines, rental only

7395 Photofinishing Laboratories

Establishments primarily engaged in developing films and in making photographic prints and enlargements for the trade or for the general public. Establishments primarily engaged in processing motion picture film for the motion picture and television industries are classified in Industry 7819.

Developing and printing of film, except
commercial motion picture film
Developing and processing of home
movies

Film processing, except for the motion
picture industry
Photograph developing and retouching
Photographic laboratories (not manu-
facturing)

SERVICES

307

Group
No. Industry
No.

739

MISCELLANEOUS BUSINESS SERVICES—Continued**7396 Trading Stamp Services**

Establishments primarily engaged in selling trading stamps to merchants, and in redeeming such stamps with merchandise. Separate redemption stores of trading stamp companies are classified as auxiliaries.

Redemption of trading stamps

Trading stamp promotion and sale to stores

7397 Commercial Testing Laboratories

Establishments primarily engaged in product testing on a fee or contract basis. Testing laboratories associated with manufacturing plants are classified as auxiliary to the manufacturing plants served.

Assaying service
Automobile proving and testing ground, commercial
Calibration and certification (testing)
Dosimetry, radiation—commercial
Film badge service (radiation detection)
Food testing service

Laboratories, testing of products (not manufacturing auxiliaries)
Radiation dosimetry laboratories—commercial
Radiographing welded joints on pipes and fittings
Seed testing laboratories
X-ray inspection service, industrial

7399 Business Services, Not Elsewhere Classified

Establishments primarily engaged in furnishing business services, not elsewhere classified, such as bondsmen, bottle exchanges, drafting service, interior designing, lecture bureaus, notary publics, packaging and labeling service, sign painting, speakers' bureaus, telephone message service, water softening service, and auctioneering service on a commission or fee basis. Auctions of used cars and agricultural commodities, such as livestock, produce, etc., are classified in Wholesale Trade.

Agents and brokers, for artists and authors
Apparel pressing service, for the trade: except permanent pressing
Appraisers, except real estate appraisers
Arbitration and conciliation service
Artists' agents and brokers
Auctioneering service, on a commission or fee basis
Authors' agents and brokers
Automobile recovery service
Automobile shows, flower shows, home shows, etc.
Bail bonding (not by bonding companies)
Batik work (hand painting on textiles)
Bondsmen
Bottle exchanges
Bronzing baby shoes
Business brokers (buying and selling business enterprises)
Charge account service (shopping plates)—collection by individual firms
Cloth cutting, bolting, or winding: for textile distributors
Contractors' disbursement control
Convention decorators
Copyright protection service
Correct time service
Corset representatives, fitting only
Cosmetic kits—lip and eye makeup (assembling and packaging)
Cotton inspection service, not connected with transportation
Cotton sampler service
Coupon redemption service, except trading stamps
Credit card service (collection by individual firms)
Decoration service for special events
Demonstration service, separate from sale

Directories, telephone: distribution on a contract basis
Divers, commercial
Drafting service, except temporary help
Drawback service, customs
Drive-a-way automobile service
Embroidering of advertising on shirts, etc.
Engraving of diplomas, resolutions, etc.
Exhibits (building of), industrial contractors
Field warehousing (not public warehousing)
Filling pressure containers (aerosol) with hair spray, insecticides, etc.
Fire extinguishers, service of
Fire protection service, other than forestry or public
Floats, decoration of
Florist telegraph service
Folding and refolding service: textiles, shirts, etc.
Fund raising organizations, on a fee basis
Gas systems, contract conversion from manufactured to natural gas
Handwriting analysis
Hoaxery pairing, on a contract or fee basis
Hotel reservation service
Human skeleton preparation, on material owned by others
Inspection of commodities, not connected with transportation
Interior decorators consulting service—not painters or paperhangers
Interior designing except painters and paperhangers
Inventory computing service
Labeling bottles, cans, cartons, etc., for the trade (not printing)
Laminating of photographs (coating photographs with plastics)

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

739

MISCELLANEOUS BUSINESS SERVICES—Continued

7399 Business Services, Not Elsewhere Classified—Continued

Lecture bureaus
Lettering service
Liquidators of merchandise on a contract basis
Mannequin service
Map drafting service
Mapmaking, including aerial
Marine reporting
Messenger service, except telegraph and radio
Metal slitting and shearing on a contract basis
Microfilm recording and developing service
Mounting merchandise on cards, on a contract basis
Music copying service
Music distribution systems, except coin-operated
Notary publics
Packaging and labeling service (not packing and crating)
Packaging service, all types
Parcel packing service (packaging)
Patent brokers
Patrol of electric transmission or gas lines
Personal investigation service, except credit
Photogrammetric mapping service (not professional engineers)
Photographic library service
Photography brokers
Playwrights' brokers
Post office contract stations
Press clipping service
Process serving service
Produce weighing service, not connected with transportation
Promoters of home shows, flower shows, etc.
Racetrack cleaning, except buildings
Radio broadcasting music checkers
Radio transcription service
Recording studios, not making commercial records
Repossession service

Rug binding for the trade
Salvaging of damaged merchandise, service only
Sampling of commodities, not connected with transportation
Scrap steel cutting, on a contract basis
Shoe designers
Show card painting
Shrinking textiles for tailors and dressmakers
Sign painting and lettering shops
Solvents recovery service, on a contract basis
Speakers' bureaus
Sponging textiles for tailors and dressmakers
Styling of fashions, apparel, furniture, textiles, etc.
Styling wigs for the trade
Swimming pool cleaning and maintenance
Switchboard operation of private branch exchanges
Tape slitting for the trade (cutting plastic, leather, etc., into widths)
Tax collection agencies: collecting for a city, county, or State
Tax title dealers: agencies for city, county, or State
Telegraph service, florist
Telephone message service
Telephone solicitation service
Textile designers
Textile folding and packing services
Textiles, sponging or shrinking: for tailors and dressmakers
Tobacco sheeting service on a contract or fee basis
Tool designers
Translation services
Water softener service
Weighing foods and other commodities, not connected with transportation
Welcome wagon service
Window trimming service
Yacht brokers

SERVICES

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Major Group 75.—AUTOMOTIVE REPAIR, SERVICES, AND GARAGES*The Major Group as a Whole*

This major group includes establishments primarily engaged in furnishing automotive repair, rental, leasing and parking services to the general public. Similar facilities owned and operated by concerns for their own use and not for the general public are treated as auxiliary establishments and are not included in this group. Establishments primarily engaged in finance leasing of passenger cars and trucks are classified in Industry 6159. Automotive repair shops operated by establishments engaged in the sale of automobiles are classified in Group 551; and those operated by gasoline service stations in Industry 5541. Repair shops of railroad companies are classified in Major Group 40; ship and boat repair establishments are classified in Group 373.

Group Industry
No. No.

751 AUTOMOTIVE RENTAL AND LEASING, WITHOUT DRIVERS**7512 Passenger Car Rental and Leasing, Without Drivers**

Establishments primarily engaged in short-term rental or extended-term leasing (with or without maintenance) of passenger cars without drivers. Finance (equity or full-payout) leasing of passenger cars is classified in Industry 6159. The rental of automobiles with drivers is classified in Industry 4110.

Automobile rental, without drivers
Car or auto leasing, without drivers,
except finance (equity) leasing
Hearses and limousines, rental without
drivers
Leasing passenger cars, without driv-
ers: except finance leasing

Passenger car leasing, except finance
leasing: without drivers
Passenger car rental, without drivers
Rent-a-car service

7513 Truck Rental and Leasing, Without Drivers

Establishments primarily engaged in short-term rental or extended-term leasing (with or without maintenance) of trucks, truck tractors, or semitrailers without drivers. Finance (equity or full-payout) leasing is classified in Industry 6159. Truck rental with drivers is classified in Group 421. Rental or leasing of heavy construction and earth-moving equipment is classified in Industry 7394.

Truck rental, without drivers

Truck leasing, except finance leasing:
without drivers

7519 Utility Trailer and Recreational Vehicle Rental

Establishments primarily engaged in daily or extended-term rental of utility trailer and recreational vehicles. Establishments primarily engaged in rental of motorcycles, bicycles, golf carts, gocarts, or recreational boats are classified in Industry 7999; and those engaged in rental of airplanes in Industry 7394.

Mobile home rental (except on site)
Motor home rental
Pop-up campers, rental

Trailer rental
Utility trailer rental

752 AUTOMOBILE PARKING**7523 Parking Lots**

Establishments primarily engaged in the temporary parking of automobiles on open air lots, usually on an hourly or daily fee basis. Establishments primarily engaged in extended or dead storage of automobiles are classified in Industry 4226.

Parking lots

Tow-in parking lots

7525 Parking Structures

Establishments primarily engaged in operating structures for the temporary parking of automobiles. Establishments primarily engaged in extended or dead storage of automobiles are classified in Industry 4226. Establishments which are a combination of structure and lot parking are included in this industry.

Garages, automobile parking

Parking structures

STANDARD INDUSTRIAL CLASSIFICATION

AUTOMOTIVE REPAIR SHOPS

Establishments primarily engaged in the repair of automotive tops, bodies, and interiors.

Automotive trim shops
Bump shops (automotive repair)
Upholstery repair, automotive

Establishments primarily engaged in repairing and retreading automotive tires. Establishments classified here may either retread customers' tires or retread tires for sale or "exchange" to the user or the trade.

**Tire repair shops
Vulcanizing tires and tubes (repair
service)**

Establishments primarily engaged in automotive painting and refinishing. Paint shops of top and body repair establishments are classified in Industry 7531.

Automotive paint shops

Establishments primarily engaged in general automotive repair.

Garages, general automotive repair
and service
Motor repair, automotive

Establishments primarily engaged in specialized automotive repair, not elsewhere classified, such as fuel service (carburetor repair), brake relining, front-end and wheel alignment, exhaust system (muffler) repair, radiator repair, and glass replacement and repair. Establishments primarily engaged in automotive welding are classified in Industry 7692. Establishments primarily engaged in automotive upholstery repair are classified in Industry 7681.

Fuel system repair, motor vehicle
Generator and starter repair, automo-
tive
Glass replacement and repair, auto-
motive
Mufflers, automotive: sale and instal-
lation
Radiator repair shops, automotive
Transmission repair, automotive
Wheel alignment, automotive

7542 Car Washes

Establishments primarily engaged in washing cars or in furnishing facilities for the self-service washing of cars.

Detailing new autos (cleaning and polishing), contract service for dealers
Laundries, automotive
Washing and polishing, automotive

SERVICES

311

Group No.	Industry No.
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754

AUTOMOTIVE SERVICES, EXCEPT REPAIR—Continued**7549 Automotive Services, Except Repair and Car Washes**

Establishments primarily engaged in furnishing automotive services, except repair and car washes. Establishments primarily providing automobile driving instructions are classified in Industry 8299.

Diagnostic centers, automotive
Inspection service, automotive

Towing service, automotive
Undercoating cars

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STANDARD INDUSTRIAL CLASSIFICATION

Major Group 76.—MISCELLANEOUS REPAIR SERVICES*The Major Group as a Whole*

This major group includes establishments engaged in miscellaneous repair services. It does not include some repair services of which the more important are: automotive repair classified in Group 753, clothing repair in Industry 7219, and shoe repair in Industry 7251.

Group Industry
No. No.

762 ELECTRICAL REPAIR SHOPS**7622 Radio and Television Repair Shops**

Establishments primarily engaged in repairing radios, television sets, phonographs, high fidelity (hi-fi) or stereophonic equipment, and tape recorders. Also included are establishments engaged in installing and repairing television sets, amateur and citizens' band antennas; or in installing and servicing radio transmitting and receiving equipment in homes, offices, small boats, automobiles, or other vehicles. This industry does not include establishments primarily engaged in the installation, repair or maintenance of radio and television broadcasting equipment (as distinguished from low-powered business, amateur and personal radio communication equipment); industrial or commercial electronic devices such as diathermy, X-ray, heat-treating and welding equipment; electronic computers and similar devices (Industry 7379); or in the construction of broadcasting antennas and towers (Industry 1629).

Aircraft radio equipment repair
Intercommunication equipment repair
Phonograph (including stereo, hi-fi,
tape recorder) repair

Public address system repair
Radio repair shops
Stereophonic equipment repair
Television repair shops

7623 Refrigeration and Air Conditioning Service and Repair Shops

Establishments primarily engaged in servicing and repairing household and commercial electrical refrigerators, and air conditioning and refrigeration equipment. Establishments primarily engaged in servicing and repairing gas refrigeration equipment are classified in Industry 7699.

Air conditioner repair, self-contained
units
Air conditioning repair, except gas

Refrigeration repair service, electric
Refrigerator (electric) repair service

7629 Electrical and Electronic Repair Shops, Not Elsewhere Classified

Establishments primarily engaged in the repair of electrical and electronic equipment, not elsewhere classified, such as electrical household appliances and electrical and electronic industrial equipment. Establishments primarily engaged in the repair of electronic computers and related equipment are classified in Industry 7379.

Aircraft electrical equipment repair,
except radio
Appliance repair, electrical
Business machine repair (electric)
Electric razor repair
Electric tool repair
Electrical measuring instrument repair
and calibration

Electrical repair shops, except radio
television and refrigerator repair
Electronic equipment repair, except
computer and related equipment
Office machine repair (electric), except
typewriters
Washing machine repair

763 WATCH, CLOCK, AND JEWELRY REPAIR**7631 Watch, Clock, and Jewelry Repair**

Establishments primarily engaged in the repair of watches, clocks, or jewelry. Assembling of watches from purchased parts is classified in Industry 3873.

Clock repair shops
Jewelry repair shops

Pearl restringing, for the trade
Watch repair shops

SERVICES

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Group Industry
No. No.**764 REUPHOLSTERY AND FURNITURE REPAIR****7641 Reupholstery and Furniture Repair**

Establishments primarily engaged in furniture reupholstery and repair. Retail establishments primarily engaged in selling upholstery materials are classified in Industry 5714; establishments making furniture and cabinets on a custom basis in Industry 5712.

Antique furniture repair and restoration
Furniture refinishing

Furniture repairing, cleaning, redecorating and remodeling shops
Repair of furniture upholstery
Reupholstery shops

769 MISCELLANEOUS REPAIR SHOPS AND RELATED SERVICES**7692 Welding Repair**

Establishments primarily engaged in general repair work by welding, including automotive welding.

Bracing (welding)
Repair of cracked castings (welding service)

Welding shops, including automotive

7694 Armature Rewinding Shops

Establishments primarily engaged in rewinding armatures and rebuilding or repairing electric motors. Establishments classified here may either repair customers' equipment, or repair or rebuild for sale or "exchange" to users or the trade.

Armature rewinding
Coil winding service
Electric motor repair

Hermetics repair
Rebuilding motors, other than automotive
Rewinding stators

7699 Repair Shops and Related Services, Not Elsewhere Classified

Establishments primarily engaged in specialized repair services, not elsewhere classified, such as bicycle repair; leather goods repair; lock and gun repair, including the making of lock parts or gun parts to individual order; musical instrument repair; business machine repair (except electrical); septic tank cleaning; farm machinery repair; furnace cleaning; knife sharpening and repair; motorcycle repair; scale repair; tank truck cleaning; taxidermists; tractor repair; and typewriter repair. Establishments primarily engaged in making leather goods to individual order are classified in Industry 5948; those primarily engaged in repairing ships and boats are classified in Group 373.

Aircraft flight instrument repair, except electrical
Antique repair and restoration, except furniture
Awning repair shops
Beer pump coil cleaning and repair service
Bicycle repair shops
Binoculars and other optical goods repair
Blacksmith shops
Boiler repair shops (not manufacturing)
Bowling pins, refinishing or repair
Caliper, gauge, and other machinists' precision instrument repair
Camera repair shops
Catch basin cleaning
Ceaspool cleaning
China firing and decorating to individual order
Cleaning and reglazing of baking pans
Cleaning bricks
Coppersmithing, repair work (other than construction)
Covering textile rolls
Dental instrument repair
Drafting instrument repair
Engine repair, except automotive
Farm machinery repair

Fire control (military) equipment repair
Fountain pen repair shops
Furnace and chimney cleaning
Furnace cleaning service
Gas appliance repair service
Glazing and cleaning baking pans
Gun parts, made to individual order
Gunsmith shops
Harness repair shops
Horseshoeing
Instrument repair, except electrical or clock
Instrument repair, mechanical
Key duplicating shops
Laboratory instrument (except electric) repair
Lawn mower repair shops
Leather goods repair shops
Lock parts, made to individual order
Locksmith shops
Luggage repair shops
Mattress renovating and repair shops
Mechanical measuring and controlling instrument repair
Meteorological instrument repair
Microscope repair
Mirror repair shops
Motorcycle repair service
Musical instrument repair shops

STANDARD INDUSTRIAL CLASSIFICATION

769

MISCELLANEOUS REPAIR SHOPS AND RELATED SERVICES—Continued

7699 Repair Shops and Related Services, Not Elsewhere Classified—Continued

Nautical and navigational instrument
(except electric) repair
Office equipment repair, nonelectric and
typewriters: except computers
Oil burner repair service
Organ tuning and repair
Piano tuning and repair
Picture framing to individual order,
not connected with retail stores
Pocketbook repair shops
Precision instrument repair
Rebabbitting
Reneedling work
Repair of optical instruments
Repair of photographic equipment
Repair of service station equipment
Repair of speedometers
Replating shops (chromium, gold, sil-
ver, etc.) on a custom basis
Rug repair shops, not combined with
cleaning
Saddlery repair shops
Scale repair service
Scientific instrument (except electric)
repair

Septic tank cleaning service
Sewer cleaning and rodding
Sewing machine repair shops
Sharpening and repairing knives, saws,
and tools
Ship boiler and tank cleaning and re-
pair—contractors
Ship scaling—contractors
Stove repair shops
Surgical instrument repair
Surveying instrument repair
Tank and boiler cleaning service
Tank truck cleaning service
Taxidermists
Tent repair shops
Thermostat repair
Tinmithing, repair work only: other
than construction
Tractor repair
Tuning of pianos and organs
Typewriter repair, including electric
Umbrella repair shops
Venetian blind repair shops
Window shade repair shops

SERVICES

315

Major Group 78.—MOTION PICTURES*The Major Group as a Whole*

This major group includes establishments producing and distributing motion pictures, exhibiting motion pictures in commercially operated theaters, and furnishing services to the motion picture industry. The term "motion pictures" includes similar productions for television or other media using film, tape or other means.

Group Industry
No. No.

781 MOTION PICTURE PRODUCTION AND ALLIED SERVICES**7813 Motion Picture Production, Except for Television**

Establishments primarily engaged in the production of theatrical and nontheatrical motion pictures for exhibition, other than for television. Establishments engaged in both production and distribution are included here; those engaged in production of educational, industrial and religious films are also included.

Audiovisual program production, except for TV
Cartoon motion picture production, except for TV
Educational motion picture production, except for TV
Industrial motion picture production, except for TV

Motion picture production and distribution, except for TV
Nontheatrical motion picture production, except for TV
Religious motion picture production, except for TV
Training motion picture production, except for TV

7814 Motion Picture and Tape Production for Television

Establishments primarily engaged in the production of theatrical and nontheatrical motion pictures and tape, including commercials, for television exhibition. Establishments engaged in both production and distribution are included here. Producers of live television shows (except tape shows) are classified in Industry 7929.

Cartoon production, television
Commercials, television: tape or film
Educational motion picture production, television
Motion picture production, television (including distribution)

Nontheatrical motion picture film and tape production for television
Television film production
Video tape production (but not reproducing)

7819 Services Allied to Motion Picture Production

Establishments primarily engaged in performing services independent of motion picture production but allied thereto, such as motion picture film processing, editing and titling; casting bureaus; wardrobe and studio property rental; television tape services (editing, transfers, etc.); and stock footage film libraries.

Casting bureaus, motion picture
Developing and printing of commercial motion picture film
Directors, motion picture: independent
Editing of motion picture film
Film libraries, stock footage
Film processing, motion picture
Laboratories, motion picture (service)
Motion picture consultants

Rental of motion picture equipment
Studio property rental for motion picture film production
Titling of motion picture film
TV tape services: editing, transfers, etc.
Wardrobe rental for motion picture film production

782 MOTION PICTURE DISTRIBUTION AND ALLIED SERVICES**7823 Motion Picture Film Exchanges**

Establishments primarily engaged in renting theatrical and nontheatrical film to exhibitors, other than in the field of television. Establishments engaged in both distribution and production are included in Industry 7818.

Film exchanges, motion picture
Motion picture distribution, exclusive of production, except for TV

Rental of motion picture film, except film for TV

316

STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

782

MOTION PICTURE DISTRIBUTION AND ALLIED SERVICES—Continued**7824 Film or Tape Distribution for Television**

Establishments primarily engaged in renting theatrical and nontheatrical film or tape to exhibitors in the field of television. Establishments engaged in both distribution and production are included in Industry 7814.

Film exchanges, motion picture: for
television
Motion picture distribution, exclusive
of production, for TV

Rental of motion picture film for TV
Tape distribution for TV

7829 Services Allied to Motion Picture Distribution

Establishments primarily engaged in performing auxiliary services to motion picture distribution, such as film delivery service, film purchasing and booking agencies, and film libraries.

Booking agencies, motion picture
Film delivery, motion picture
Film libraries, motion picture

Film purchasing agencies, motion pic-
ture
Theatrical booking agencies: motion
picture

783

MOTION PICTURE THEATERS**7832 Motion Picture Theaters, Except Drive-in**

Commercially operated conventional or "four-wall" theaters primarily engaged in the indoor exhibition of motion pictures. Establishments primarily engaged in the commercial exhibition of motion pictures on an itinerant basis with portable projection and sound equipment are included in this industry.

Motion picture exhibitors for airlines
Motion picture exhibitors, itinerant

Theaters, motion picture, except drive-
in

7833 Drive-in Motion Picture Theaters

Commercially operated theaters, commonly known as "drive-in", primarily engaged in the outdoor exhibition of motion pictures.

Motion picture theaters, drive-in

Theaters, motion picture, drive-in

SERVICES

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Major Group 79.—AMUSEMENT AND RECREATION SERVICES, EXCEPT MOTION PICTURES

The Major Group as a Whole

This major group includes establishments engaged in providing amusement or entertainment on payment of a fee or admission charge, except motion picture theaters (Group 783.)

Group No. Industry No.

791 DANCE HALLS, STUDIOS, AND SCHOOLS

7911 Dance Halls, Studios, and Schools

Establishments primarily engaged in operating public dance halls or ballrooms, and dance studios and schools. The renting of dance halls or ballrooms to operators is classified as a real estate operation in Major Group 85.

Ballroom operation
Children's dancing schools
Dance hall operation

Dance instructors
Dance studios and schools
Professional dancing schools

792 THEATRICAL PRODUCERS (EXCEPT MOTION PICTURES), BANDS, ORCHESTRAS, AND ENTERTAINERS

7922 Theatrical Producers (Except Motion Picture) and Miscellaneous Theatrical Services

Establishments primarily engaged in providing "live" theatrical presentations, such as road companies, stock companies, summer theater, and burlesque houses. This industry also includes services allied with theatrical presentations, such as casting agencies; booking agencies for plays, artists, and concerts; scenery, lighting, and other equipment service; and theatrical ticket agencies. Theaters which are normally rented to theatrical producers, stock companies, etc., are classified as real estate operations (Industry 8512). Motion picture theaters and motion picture service industries are classified in Major Group 78.

Ballet production
Booking agencies, theatrical: except motion picture
Burlesque companies
Concert management service
Costume design, theatrical
Employment agencies: theatrical, radio, and television
Legitimate theater producers
Opera companies
Plays (road companies and stock companies)
Radio and television program producers
Rental of theatrical scenery

Repertory or stock companies, theatrical
Scenery design, theatrical
Stock companies, theatrical
Television program, including commercials, producers
Theatrical companies, amateur
Theatrical equipment rental
Theatrical lighting, on a contract basis
Theatrical production, except motion picture
Theatrical ticket agencies
Ticket agencies, theatrical
Vaudeville companies

7929 Bands, Orchestras, Actors, and Other Entertainers and Entertainment Groups

Establishments primarily engaged in providing entertainment services other than "live" theatrical presentations. These establishments include bands, orchestras, entertainers and producers of "live" entertainment for radio or television.

Actors
Classical music groups or artists
Concert artists
Concert organizations
Dance bands
Entertainers
Entertainment groups

Entertainment service: entertainers for restaurants, clubs, radio, and TV
Jazz music groups or artists
Popular music groups or artists
Symphony orchestras
Magicians
Orchestras

793 BOWLING ALLEYS AND BILLIARD AND POOL ESTABLISHMENTS

7932 Billiard and Pool Establishments

Establishments known to the public as billiard and pool parlors. Such establishments also frequently sell meals and refreshments.

Billiard parlors

Pool parlors

318

STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

793 BOWLING ALLEYS AND BILLIARD AND POOL ESTABLISHMENTS—Continued

7933 Bowling Alleys

Establishments known to the public as bowling alleys or lanes. Such establishments also frequently sell meals and refreshments.

Bowling alleys
Duck pin alleys

Ten pin alleys

794 COMMERCIAL SPORTS

7941 Professional Sports Clubs and Promoters

Operators and promoters of professional and semiprofessional athletic clubs, promoters of athletic events, and managers of individual professional athletes. Stadiums and athletic fields are included only if the operator is actually engaged in the promotion of athletic events. They are otherwise classified as a real estate operation, Major Group 65.

Arenas, boxing and wrestling (sports promotion), professional
Athletic field operation (sports promotion)
Baseball clubs
Basketball clubs
Football clubs
Ice hockey clubs
Managers of individual professional athletesProfessional or semiprofessional sports clubs
Promoters, sports events
Soccer clubs
Sports field operation (sports promotion)
Sports promotion, professional: baseball, football, boxing, etc.
Stadiums (sports promotion)

7948 Racing, Including Track Operation

Promoters and participants in racing activities, including race track operators, operators of racing stables, jockeys, race horse trainers, and race car owners and operators.

Dragstrip operation
Horses, breeding and racing
Jockeys, horse racing
Kennels, dog racing
Motorcycle racing
Race car drivers and ownersRace horse owners
Race track operation: horse, dog, auto, etc.
Racing stables, operation of
Speedway operation
Stock car racing

799 MISCELLANEOUS AMUSEMENT AND RECREATION SERVICES

7992 Public Golf Courses

Establishments primarily engaged in the operation of golf courses open to the general public on a fee basis. Membership golf and country clubs are classified in Industry 7997. Miniature golf courses and golf driving ranges are classified in Industry 7999.

Golf clubs, nonmembership

Golf courses, public: operation of

7993 Coin-operated Amusement Devices

Establishments primarily engaged in operating coin-operated amusement devices, either in their own or in other places of business. Such amusement devices include juke boxes, pinball machines, mechanical games, slot machines, and similar types of amusement equipment. Amusement arcades and parlors are also included in this industry.

Amusement device (coin-operated)
parlors
Amusement machines, coin-operated:
operation of
Arcades, amusementGambling establishments, primarily operating coin-operated machines
Gambling machines, coin-operated: operation of
Music distribution systems, coin-operated

SERVICES

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Group Industry
No. No.
799

MISCELLANEOUS AMUSEMENT AND RECREATION SERVICES—Continued**7996 Amusement Parks**

Establishments known as amusement parks, kiddie parks, etc., which group together and operate in whole or in part a number of attractions such as mechanical rides, amusement devices, refreshment stands and picnic grounds. Amusement concessionaires operating within the park are classified in Industry 7999.

Amusement centers, and parks (not
fairs, circuses or carnivals)
Amusement parks

Kiddie parks
Piers, amusement
Theme parks (amusement)

7997 Membership Sports and Recreation Clubs

Sports and recreation clubs which are restricted to use by members and their guests. Country, golf, tennis and yacht clubs are included in this industry. Health and physical culture clubs are included in Industry 7299.

Athletic clubs and gymnasiums, mem-
bership
Aviation clubs, membership
Baseball clubs—little leagues
Bathing beaches, membership
Beach clubs, membership
Boating clubs, membership
Bridge clubs, membership
Clubs, membership: sports and recrea-
tion
Country clubs, membership
Flying fields, maintained by aviation
clubs

Golf clubs, membership
Gun clubs, membership
Hunt clubs, membership
Recreation and sports clubs, member-
ship
Riding clubs, membership
Shooting clubs, membership
Sports and recreation clubs, member-
ship
Swimming clubs, membership
Tennis clubs, membership
Yacht clubs, membership

7999 Amusement and Recreation Services, Not Elsewhere Classified

Establishments primarily engaged in the operation of sports, amusement, and recreation services, not elsewhere classified, such as bathing beaches, swimming pools, riding academies and schools, carnival operation, exposition operation, game parlors, horse shows, picnic grounds operation, rental of rowboats and canoes, and shooting galleries. Establishments operating amusement parks are classified in Industry 7996; those operating coin-operated amusement devices in Industry 7998; and those operating membership sports and recreation clubs in Industry 7997.

Aerial tramways, amusement or scenic
Amusement concessions
Amusement rides
Animal and reptile exhibits, commercial
Animal shows, in circuses, fairs, and
carnivals
Aquariums, commercial
Art galleries, commercial
Astrologers
Baseball instruction schools
Basketball instruction schools
Bath houses, independently operated
Bathing beaches, nonmembership
Boat rental, pleasure
Boats, party fishing: operation of
Bookies
Bookmakers, race
Botanical gardens, commercial
Bowling instruction
Bridge clubs, nonmembership
Bridge instruction
Cable lifts, amusement or scenic, op-
erated separately from lodges
Canoe rental
Carnival operation
Cave operation
Circus companies
Concession operators, amusement de-
vices and rides
Day camps
Exhibition operation
Exposition operation
Fairs, agricultural: operation of
Fireworks display service
Fishing lakes, operation of
Fortune tellers

Gambling establishments, not primarily
operating coin-operated machines
Gambling machines, except coin-op-
erated: operation of
Game parlors (not coin-operated)
Games, teaching of
Go-cart raceway operation
Go-cart rentals
Golf courses, miniature: operation of
Golf driving ranges
Golf, pitch-n-putt
Golf professionals, not operating retail
stores
Gymnasiums, operation of: nonmem-
bership
Horse shows
Houseboat rentals
Hunting guides
Judo instruction
Karate instruction
Motorcycle rental
Museums, commercial
Natural wonders, tourist attraction:
commercial
Observation tower operation
Off-track betting
Pack trains, for amusement
Parachute training (for pleasure)
Phrenologists
Physical culture schools (gymnasiums)
Picnic grounds operation
Ping pong parlors
Planetaria, commercial
Rental of beach chairs and accessories
Rental of bicycles
Rental of golf carts

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

799 MISCELLANEOUS AMUSEMENT AND RECREATION SERVICES—Continued

7999 Amusement and Recreation Services, Not Elsewhere Classified—Continued

Rental of rowboats and canoes
 Rental of saddle horses
 Reptile or animal exhibits, commercial
 Riding academies and schools
 Riding stables
 Scenic railroads for amusement
 Shooting galleries
 Skating instruction, ice or roller
 Skating rink operation: ice or roller
 Ski instruction
 Ski lifts, cable lifts, ski tows: operated
 separately from lodges
 Ski rental concessions
 Slot-car race tracks
 Sporting goods rental
 Sports instructors, professional: for
 golf, skiing, swimming, etc.

Sports professionals
 Swimming instruction
 Swimming pools
 Tennis clubs, nonmembership
 Tennis courts, outdoor and indoor: op-
 eration of—nonmembership
 Tennis professionals
 Ticket sales offices for sporting events,
 contract
 Tourist attractions, natural wonder:
 commercial
 Tourist guides
 Trampoline operation
 Wax figure exhibitions
 Yoga instruction
 Zoological gardens, commercial

SERVICES

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Major Group 80.—HEALTH SERVICES*The Major Group as a Whole*

This major group includes establishments primarily engaged in furnishing medical, surgical, and other health service to persons. Associations or groups primarily engaged in providing medical or other health services to members are included, but those which limit their services to the provision of insurance against hospitalization or medical costs are classified in Major Group 63.

Group Industry
No. No.

801 OFFICES OF PHYSICIANS**8011 Offices of Physicians**

Establishments of licensed practitioners having the degree of M.D. and engaged in the practice of general or specialized medicine and surgery. Establishments such as group clinics, in which a group of physicians are associated for the purpose of carrying on their profession, are included in this industry. Osteopathic physicians are classified in Industry 8081.

Clinics, operated by groups of physicians
Dispensaries, operated by groups of physicians
Gynecologists, offices of
Neurologists, offices of
Obstetricians, offices of
Oculists, offices of
Ophthalmologists, offices of

Pathologists, offices of
Physicians (M.D.), including specialists: offices of
Plastic surgeons, offices of
Psychiatrists, offices of
Psychoanalysts, offices of
Radiologists, offices of
Surgeons, offices of

802 OFFICES OF DENTISTS**8021 Offices of Dentists**

Establishments of licensed practitioners having the degree of D.D.S. (or D.D. Sc.) and engaged in the practice of general or specialized dentistry, including dental surgery.

Dental surgeons, offices of
Dentists, offices of

Orthodontists, offices of

803 OFFICES OF OSTEOPATHIC PHYSICIANS**8031 Offices of Osteopathic Physicians**

Establishments of licensed practitioners engaged in the practice of general or specialized osteopathy.

Osteopathic physicians, offices of

804 OFFICES OF OTHER HEALTH PRACTITIONERS**8041 Offices of Chiropractors**

Establishments of licensed practitioners engaged in the practice of chiropraxis.

Chiropractors, offices of

8042 Offices of Optometrists

Establishments of licensed practitioners engaged in the practice of optometry.

Optometrists, offices of

8049 Offices of Health Practitioners, Not Elsewhere Classified

Establishments of licensed practitioners engaged in practice in health fields, not elsewhere classified.

Chiropodists, offices of
Christian Science practitioners, offices of
Dieticians, offices of
Midwives, offices of
Naturopaths, offices of
Nurses, registered and practical, offices of

Nutritionists, offices of
Occupational therapists, offices of
Podiatrists, offices of
Physiotherapists, offices of
Psychologists, clinical: offices of
Psychotherapists (not M.D.), offices of

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STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.
805

NURSING AND PERSONAL CARE FACILITIES

This group includes establishments primarily engaged in providing nursing and health-related personal care, with inpatient beds. Establishments providing diagnostic, surgical and extensive medical services are classified in Group 806.

8051 Skilled Nursing Care Facilities

Establishments primarily engaged in providing care and treatment for patients who require continuous health care, but not hospital services. These establishments have an organized medical staff, including physician and continuous nursing services. Included are extended care facilities as well as other types of continuous nursing care facilities.

Extended care facilities

Nursing homes, skilled

8059 Nursing and Personal Care Facilities, Not Elsewhere Classified

Establishments primarily engaged in providing some nursing and health-related personal care, but not continuous nursing services. These establishments have at least one shift with a licensed or registered nurse to provide routine health care and observation. Included are rest homes, convalescent homes and other institutions where health care is a major element. Establishments primarily engaged in providing day-to-day personal care but not health care by registered or licensed nurses are classified in Industry 8361.

Convalescent homes with health care
Domiciliary care with health care
Homes for retarded with health care

Personal care facilities with health care
Personal care homes with health care
Rest homes with health care

806

HOSPITALS

This group includes establishments primarily engaged in providing diagnostic services, extensive medical treatment including surgical services, and other hospital services, as well as continuous nursing services. These establishments have an organized medical staff, inpatient beds, and equipment and facilities to provide complete health care.

8062 General Medical and Surgical Hospitals

Establishments primarily engaged in providing general medical and surgical services and other hospital services. Specialty hospitals are classified in Industries 8063 and 8069.

General medical and surgical hospitals

8063 Psychiatric Hospitals

Establishments primarily engaged in providing diagnostic medical services and inpatient treatment for the mentally ill.

Mental hospitals

Psychiatric hospitals

8069 Specialty Hospitals, Except Psychiatric

Establishments primarily engaged in providing diagnostic services, treatment and other hospital services for patients with specified types of illnesses, except mental. Psychiatric hospitals are classified in Industry 8063.

Children's hospitals
Chronic disease hospitals
Eye, ear, nose, and throat hospitals
Geriatric hospitals

Hospitals, specialty except psychiatric
Maternity hospitals
Orthopedic hospitals
Tuberculosis hospitals

SERVICES

323

Group
No. Industry
No.**807 MEDICAL AND DENTAL LABORATORIES****8071 Medical Laboratories**

Establishments primarily engaged in providing professional analytic or diagnostic services to the medical profession, or to the patient on prescription of a physician.

Bacteriological laboratories (not manufacturing)
Biological laboratories (not manufacturing)
Chemists, biological (not manufacturing), laboratories of

Medical laboratories (clinical)
Pathological laboratories
X-ray laboratories (not manufacturing)

8072 Dental Laboratories

Establishments primarily engaged in making dentures and artificial teeth to order for the dental profession. The manufacture of artificial teeth other than to order is classified in Industry 8848.

Dental laboratories
Dentures, made in dental laboratories to order for the dental profession

Teeth, artificial—made in dental laboratories to order for the profession

808**OUTPATIENT CARE FACILITIES****8081 Outpatient Care Facilities**

Establishments primarily engaged in outpatient care with permanent facilities and with medical staff to provide diagnosis, treatment, or both for patients who are ambulatory and do not require inpatient care. Associations or groups formed primarily to provide medical or other health service to their members, and which themselves provide these facilities, are included in this industry.

Family planning clinics
Clinics, not operated by groups of licensed health practitioners
Dental insurance (providing services through own facilities)
Dispensaries, not operated by groups of licensed health practitioners
Group health associations, providing medical services (not insurance) only

Health maintenance organizations (HMO)
Medical insurance (providing services through own facilities)
Outpatient treatment clinics for alcoholism
Outpatient treatment clinics for drugs
Rehabilitation centers, outpatient (medical treatment)
Speech defect clinics

809**HEALTH AND ALLIED SERVICES, NOT ELSEWHERE CLASSIFIED****8091 Health and Allied Services, Not Elsewhere Classified**

Establishments primarily engaged in rendering health and allied services, not elsewhere classified. Establishments of registered or practical nurses engaged in the independent practice of their profession are classified in Industry 8049; and nurses' registries in Industry 7861. Establishments, such as Blue Cross and Blue Shield plans, whose members are supplied these services by independent physicians or hospitals under contract are classified in Industry 6824.

Blood banks
Blood donor stations
Medical photography and art

Oxygen tent service
Visiting nurse associations

STANDARD INDUSTRIAL CLASSIFICATION

The Major Group as a Whole

Group No.	Industry No.
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8111 Legal Services

Legal aid services
Legal services
Patent solicitors' offices
Referees in bankruptcy

SERVICES

325

Major Group 82.—EDUCATIONAL SERVICES*The Major Group as a Whole*

This major group includes establishments furnishing formal academic or technical courses, correspondence schools, commercial and trade schools, and libraries. Schools for the instruction of beauty parlor operators are classified in Group 723; and barber colleges in Group 724. Establishments primarily engaged in providing job training are classified in Industry 8331.

Group Industry
No. No.

821 ELEMENTARY AND SECONDARY SCHOOLS**8211 Elementary and Secondary Schools**

Elementary and secondary schools below university grade (ordinarily grades 1 through 12), including denominational and sectarian; kindergartens and military academies are also included.

Academies (elementary and secondary schools)
Boarding schools
Finishing schools (secondary)
High schools, junior and senior
Kindergartens
Military academies, elementary or secondary level
Preparatory schools

Schools, elementary and secondary
Schools for retarded
Schools for the physically handicapped (elementary and secondary)
Sectarian schools (elementary and secondary)
Seminaries, below university grade
Vocational high schools

822 COLLEGES, UNIVERSITIES, PROFESSIONAL SCHOOLS, AND JUNIOR COLLEGES**8221 Colleges, Universities, and Professional Schools**

Colleges, universities, and professional schools granting academic degrees and requiring for admission at least a high school diploma or equivalent general academic training.

Colleges, except junior
Professional schools: dental, engineering, law, medical, etc.

Service academies (college)
Theological seminaries
Universities

8222 Junior Colleges and Technical Institutes

Junior colleges and technical institutes requiring for admission at least a high school diploma or equivalent general academic training, and granting associate academic degrees, certificates, or diplomas. Schools having junior college grades in conjunction with secondary grades are classified in Industry 8211.

Community colleges (junior)
Junior colleges

Technical institutes

823 LIBRARIES AND INFORMATION CENTERS**8231 Libraries and Information Centers**

Centers for documentation
Circulating libraries
Lending libraries

Libraries
Rental of books

824 CORRESPONDENCE SCHOOLS AND VOCATIONAL SCHOOLS**8241 Correspondence Schools**

Establishments primarily engaged in furnishing educational courses by mail. Offices maintained by such schools for the sale of correspondence courses are included.

Correspondence schools, including branch offices and solicitors

326

STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.

824 CORRESPONDENCE SCHOOLS AND VOCATIONAL SCHOOLS—Continued

8243 Data Processing Schools

Establishments primarily engaged in offering data processing courses in programming, and in computer and peripheral equipment operation, including keypunch operation. Schools offering an academic degree in computer sciences are classified in Industry Group 822.

Data processing schools

8244 Business and Secretarial Schools

Establishments primarily engaged in offering courses in business machines operation (except data processing), office procedures, and secretarial and stenographic skills.

Business colleges and schools, not of
college grade
Commercial schools, not of college
grade

Secretarial schools, not of college
grade

8249 Vocational Schools, Except Vocational High Schools, Not Elsewhere Classified

Establishments primarily engaged in offering specialized trade or commercial courses, not elsewhere classified, but not academic training. Beauty schools are classified in Industry 7281 and barber schools in Industry 7241. Flying instruction is classified in Industry 8200.

Aviation schools
Banking schools (training in banking)
Commercial art schools
Nurses schools, practical

Trade schools
Vocational schools, except high schools,
data processing or business

829

SCHOOLS AND EDUCATIONAL SERVICES, NOT ELSEWHERE CLASSIFIED

8299 Schools and Educational Services, Not Elsewhere Classified

Specialized nondegree granting schools, not elsewhere classified, such as music schools, dramatic schools, language schools, and Civil Service and other short term examination preparatory schools. Dancing schools are classified in Industry 7911.

Art schools, except commercial
Automobile driving instruction
Baton instruction
Bible schools, not operated by churches
Ceramic schools
Charm schools
Civil service schools
Diction schools
Dramatic schools
Finishing schools (charm and model-
ing)

Flying instruction
Hypnosis schools
Language schools
Modeling (clothes) schools
Music schools
Personal development schools
Public speaking schools
Reading schools
Tutoring schools
Vocational counseling, except rehabili-
tation counseling

SERVICES

327

Major Group 83.—SOCIAL SERVICES*The Major Group as a Whole*

This major group includes establishments providing social services and rehabilitation services to those persons with social or personal problems requiring special services and to the handicapped and the disadvantaged. Also included are organizations soliciting funds to be used directly for these and related services. Establishments primarily engaged in providing health services are classified in Major Group 80, legal services are classified in Industry 8111, and educational services in Major Group 82.

Group Industry
No. No.

832 INDIVIDUAL AND FAMILY SOCIAL SERVICES**8321 Individual and Family Social Services**

Establishments primarily engaged in providing one or more of a wide variety of individual and family social, counseling, welfare, or referral services, including refugee, disaster and temporary relief services. This industry includes offices of specialists providing counseling, referral and other social services. Government offices directly concerned with the delivery of social services to individuals and families, such as issuing of welfare aid, rent supplements, food stamps, eligibility casework, etc. are included here, but central office administration of these programs is classified in Industry 9441. Social Security offices are classified in Industry 9441. Establishments primarily engaged in providing vocational rehabilitation or counseling are classified in Industry 8331; fraternal, civic, and social associations are classified in Industry 8641.

Adoption services
Adult day care centers
Aid to families with dependent children (AFDC)
Centers for senior citizens
Child guidance agencies
Community centers
Counseling centers
Disaster services
Family location services
Family (marriage) counseling services
Family service agencies
Helping hand services: Big Brother, Big Sister, etc.
Homemakers' services

Multi-service centers (neighborhood)
Neighborhood centers
Old age assistance
Public welfare centers (offices)
Referral services for personal and social problems
Refugee services
Relief services, temporary
Service leagues
Settlement houses
Social service centers: Salvation Army, etc.
Traveler's Aid centers
Youth centers

833 JOB TRAINING AND VOCATIONAL REHABILITATION SERVICES**8331 Job Training and Vocational Rehabilitation Services**

Establishments primarily engaged in providing manpower training and vocational rehabilitation and habilitation services for the unemployed, the underemployed, the handicapped, and to persons who have a job market disadvantage because of lack of education, job skill or experience, skill obsolescences, or personal characteristics or problems. Included are upgrading and job-development services, skill training, world-of-work orientation, and vocational rehabilitation counseling. This industry includes offices of specialists providing rehabilitation and job counseling. Also included are establishments primarily engaged in providing work experience for rehabilitees.

Job counseling
Job training
Manpower training
Sheltered workshops
Skill training centers
Vocational rehabilitation agencies

Vocational rehabilitation counseling
Vocational training agencies, except schools
Work experience centers (OIC, Goodwill, Job Corps, Lighthouse for the Blind)

328

STANDARD INDUSTRIAL CLASSIFICATION

Group Industry
No. No.
835

CHILD DAY CARE SERVICES**8351 Child Day Care Services**

Establishments primarily engaged in the care of infants or children, or in providing prekindergarten education where medical care or delinquency correction is not a major element. These establishments may or may not have substantial educational programs. These establishments generally care for prekindergarten or preschool children, but may care for older children when they are not in school. Establishments providing babysitting services are classified in Industry 7200.

Child care centers
Day care centers
Group day care centers
Head Start centers, except in conjunction with schools

Nursery schools
Preschool centers

836

RESIDENTIAL CARE**8361 Residential Care**

Establishments primarily engaged in the provision of residential social and personal care for children, the aged and special categories of persons with some limits on ability for self-care but where medical care is not a major element. Included are establishments providing 24-hour, year round, care for children. Boarding schools providing elementary and secondary education are classified in Industry 8211.

Boys' towns
Children's boarding homes
Children's homes
Children's villages
Group foster homes
Halfway group homes for persons with social or personal problems
Halfway homes for delinquents and offenders
Homes for destitute men and women
Homes for children, with health care incidental
Homes for retarded, with health care incidental
Homes for the aged, with health care incidental

Homes for the deaf or blind, with health care incidental
Homes for the emotionally disturbed, with health care incidental
Homes for the physically handicapped, with health care incidental
Juvenile correctional homes
Old soldiers' homes
Orphanages
Rehabilitation (residential) centers, with health care incidental
Rest homes, with health care incidental
Self-help group homes for persons with social or personal problems
Training schools for delinquents

839

SOCIAL SERVICES, NOT ELSEWHERE CLASSIFIED**8399 Social Services, Not Elsewhere Classified**

Establishments primarily engaged in providing social services, not elsewhere classified, including those establishments primarily engaged in community improvement, social change and neighborhood development. Organizations primarily engaged in soliciting contributions on their own account, and administering appropriations and allocating funds among other agencies engaged in social welfare services are also included, but foundations and philanthropic trusts are classified in Industry 6732. Establishments primarily engaged in the prevention of criminal or anti-social behavior are included, as are those providing rehabilitation services for ex-prisoners; but those establishments that provide residential care are classified in Industry 8361. Jails and reformatories are classified in Industry 9223. Civic, social and fraternal organizations are classified in Industry 8641; political organizations in Industry 8651; and establishments which raise funds on a contract basis in Industry 7390.

Antipoverty boards
Associations for retarded children, the blind, the handicapped, etc.
Community action agencies
Community chests
Community development groups
Councils for social agencies, exceptional children, poverty, etc.
Fund raising organizations, except on a fee basis (united funds, etc.)
Health and welfare councils
Neighborhood development groups
Offender rehabilitation agencies
Offender self-help organizations

Parole offices
Probation offices
Self-help organizations: alcoholics and gamblers anonymous
Senior citizens associations
Social change associations: Urban Coalition, Urban League, etc.
Social service information exchanges: alcoholism, drug addiction, etc.
United fund councils
United Givers Funds
Youth self-help agencies: Mobilization for Youth, HARYOU Act, Pride, Inc.

SERVICES

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**Major Group 84.—MUSEUMS, ART GALLERIES, BOTANICAL
AND ZOOLOGICAL GARDENS***The Major Group as a Whole*

This major group includes museums, art galleries, and botanical and zoological gardens, which are not operated commercially. Receipts or funding of these establishments are not primarily from admission charges. These establishments are of historical, educational or cultural interest.

Group Industry
No. No.

841 MUSEUMS AND ART GALLERIES**8411 Museums and Art Galleries**

Establishments primarily engaged in noncommercial operation of museums and art galleries. This industry does not include establishments primarily operating museums and art galleries commercially, i.e., receipts primarily from admission charges. Art galleries or art dealers primarily selling to the general public are classified in Industry 5900 and commercially operated museums in Industry 7900.

Art galleries, noncommercial
Museums, noncommercial

Planetaria, noncommercial

842 ARBORETA, BOTANICAL, AND ZOOLOGICAL GARDENS**8421 Arboreta, Botanical, and Zoological Gardens**

Establishments primarily engaged in the noncommercial operation of arboreta, and botanical and zoological gardens. Establishments primarily operating commercial exhibits are classified in Industry 7900.

Aquariums, noncommercial
Arboreta, noncommercial

Botanical gardens, noncommercial
Zoological gardens, noncommercial

330

STANDARD INDUSTRIAL CLASSIFICATION

Major Group 86.—MEMBERSHIP ORGANIZATIONS*The Major Group as a Whole*

This major group includes organizations operating on a membership basis for the promotion of the interests of the members. Included are such as trade associations; professional membership organizations; labor unions and similar labor organizations; and political and religious organizations. This major group does not include business establishments operated by membership organizations, such as hospitals (Group 806), hotels (Major Group 70), concert or opera companies (Group 792), news syndicates (Industry 7351), golf and country clubs (Industry 7997), fraternity and sorority houses (Industry 7041), credit unions (Group 614), fraternal insurance offices (Major Group 63), and religious publishing houses (Major Group 27).

Group Industry
No. No.

861 BUSINESS ASSOCIATIONS**8611 Business Associations**

Membership organizations engaged in promoting business interests.

Better business bureaus
Boards of trade, other than security
and commodity exchanges
Business associations, other than civic
and social
Chambers of Commerce
Contractor's associations
Growers' associations, not engaged in
contract buying or selling
Growers' marketing advisory services

Industrial standards committees
Junior Chambers of Commerce
Manufacturers' institutes
Merchants' associations, not engaged
in credit investigations
Public utility associations
Real estate boards
Shipping and steamship company asso-
ciations
Trade associations

862 PROFESSIONAL MEMBERSHIP ORGANIZATIONS**8621 Professional Membership Organizations**

Membership organizations of professional persons for the advancement of the inter-
ests of their profession.

Bar associations
Dental associations
Engineering associations

Medical associations
Professional membership organizations
Scientific membership associations

863 LABOR UNIONS AND SIMILAR LABOR ORGANIZATIONS**8631 Labor Unions and Similar Labor Organizations**

Membership organizations of workers for the improvement of wages and working
conditions.

Employees' associations, for improve-
ment of wages and working condi-
tions

Labor organizations
Labor unions
Trade unions, local or national

864 CIVIC, SOCIAL, AND FRATERNAL ASSOCIATIONS**8641 Civic, Social, and Fraternal Associations**

Membership organizations engaged in civic, social, or fraternal activities. Member-
ship sports and recreation clubs are classified in Industry 7997, and insurance offices
maintained by fraternal organizations in Major Group 68.

Alumni associations and clubs
Boy Scout organizations
Businessmen's clubs, civic and social
Barns and restaurants, owned and op-
erated for members of organizations
only
Citizens' unions
Civic associations
Community membership clubs, other
than amusement and recreation
clubs
Fraternal associations, other than in-
surance offices

Fraternities and sororities, except resi-
dential
Girl Scout organizations
Taxpayers' associations
University clubs
Veterans' organizations
Parent-teacher associations
Singing societies
Social clubs, membership
Youth associations, except hotel units:
YMCA, YWCA, YMHA, YWHA

SERVICES

331

Group Industry
No. No.

865 POLITICAL ORGANIZATIONS**8651 Political Organizations**

Membership organizations established to promote the interests of a national, State, or local political party or candidate.

Democratic clubs
Political organizations and clubs

Republican clubs

866 RELIGIOUS ORGANIZATIONS**8661 Religious Organizations**

Establishments of religious organizations operated for worship or for promotion of religious activities. Other establishments maintained by religious organizations, such as educational institutions, hospitals, publishing houses, and reading rooms are classified according to their activities.

Churches
Convents
Monasteries

Religion schools, operated by religious
organizations
Religious organizations

869 MEMBERSHIP ORGANIZATIONS, NOT ELSEWHERE CLASSIFIED**8699 Membership Organizations, Not Elsewhere Classified**

Membership organizations, not elsewhere classified.

Athletic associations—regulatory only
Automobile owners' associations and
clubs
Christian Science reading rooms
Farm bureaus

Farm granges
Historical clubs, other than profes-
sional
Humane societies, animal
Poetry associations

The Major Group as a Whole

Group No.	Industry No.
881	PRIVATE HOUSEHOLDS
8811	Private Households

Private households which employ workers who serve on or about the premises in occupations usually considered as domestic service.

Babysitting (private households employing babysitters in the home)
Domestic service (private households employing cooks, maids, etc.)
Estates, private
Farm homes, noncommercial

Farms, residential: noncommercial
Households, private: employing cooks,
maids, chauffeurs, gardeners, etc.
Personal affairs management
Residential farms, noncommercial

SERVICES

333

Major Group 89.—MISCELLANEOUS SERVICES*The Major Group as a Whole*

This major group includes establishments engaged in performing services, not elsewhere classified, such as those rendered by engineers, architects, accountants, artists, lecturers, and writers. This major group also includes noncommercial establishments primarily engaged in educational, scientific, and research activities.

Group Industry
No. No.

891 ENGINEERING, ARCHITECTURAL, AND SURVEYING SERVICES**8911 Engineering, Architectural, and Surveying Services**

Establishments primarily performing services of a professional nature in the fields of engineering, architecture, and land surveying.

Architectural service
Designing: ship, boat, machine, and
product
Engineering: industrial, civil, elec-
trical, mechanical, design, etc.

Marine engineering
Petroleum engineering
Photogrammetric engineering
Surveying: land, water, and aerial

892 NONCOMMERCIAL EDUCATIONAL, SCIENTIFIC, AND RESEARCH ORGANIZATIONS**8922 Noncommercial Educational, Scientific, and Research Organizations**

Establishments primarily engaged in noncommercial research into, and dissemination of, information for public health, education, or general welfare. Establishments included here operate primarily on funds from endowments, contributions, and grants. Establishments primarily engaged in research on a contract or fee (commercial) basis are classified in Major Group 78.

Archeological expeditions
Educational research agencies, non-
commercial
Medical research, noncommercial (can-
cer, TB, etc.)
Research agencies, scientific and edu-
cational: noncommercial

Research institutes: Brookings, Carne-
gie, NBER, etc.
Scientific research agencies, noncom-
mercial
Social research, noncommercial

893 ACCOUNTING, AUDITING, AND BOOKKEEPING SERVICES**8931 Accounting, Auditing, and Bookkeeping Services**

Establishments primarily engaged in furnishing accounting, auditing, and bookkeeping services. Such establishments may, as part of providing such service, use data processing and tabulating techniques; however, establishments primarily engaged in providing data processing and tabulating services, not as a part of accounting, bookkeeping, and auditing service, are classified in Group 737. Establishments providing income tax return preparation service are included in Industry 7299.

Accounting services
Auditing services
Billing and bookkeeping service
Certified public accountants

Bookkeeping and billing services
Payroll accounting service
Public accountants, certified

899 SERVICES, NOT ELSEWHERE CLASSIFIED**8999 Services, Not Elsewhere Classified**

Establishments primarily providing services, not elsewhere classified, such as authors, lecturers, radio commentators, song writers, weather forecasters, writers, and artists working on their own account. Establishments primarily providing commercial art services are classified in Industry 7333.

STANDARD INDUSTRIAL CLASSIFICATION

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SERVICES, NOT ELSEWHERE CLASSIFIED—Continued

8999 Services, Not Elsewhere Classified—Continued

Actuaries, consulting
Advertising copy, writers of
Announcers, radio and television service
Art restoration
Artificial nucleation (cloud seeding)
Artists, excluding commercial and medical artists
Artists' studios, except commercial and medical
Authors
Chemists, consulting: not connected with business service laboratories
Christian Science lecturers
Cloud seeding
Consultants, nuclear, not connected with business service laboratories
Entomologists, consulting: not with business service laboratories

Geologists, consulting: not connected
with business service laboratories
Ghost writing
Greeting cards, hand painting of
Inventors
Lecturers
Music arrangers
Newspaper columnists
Physicists, consulting: not connected
with business service laboratories
Psychologists, industrial
Radio commentators
Sculptors' studios
Songwriters
Stained glass artists
Weather forecasters
Weather modification (rainmakers)
Writers

Division J

Public Administration

The Division as a Whole

This division includes the legislative, judicial, administrative and regulatory activities of Federal, State, local and international governments. Government-owned and operated business establishments are classified in Major Groups 01-89 according to the activity in which they are engaged.

335

STANDARD INDUSTRIAL CLASSIFICATION

The Major Group as a Whole

Group No.	Industry No.
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9111 Executive Offices

City and town managers' offices
County supervisors' and executives'
offices
Executive advisory commissions

Governors' offices
Mayors' offices
President's office

9121 Legislative Bodies

**Boards of supervisors
City and town councils
Congress**

County commissioners
Legislative advisory commissions
Legislative assemblies

9181 Executive and Legislative Offices Combined

Legislative and executive office combinations

9199 General Government, Not Elsewhere Classified

Civil rights commissions
Civil service commissions
General accounting offices—government
General services departments—government
Office of Emergency Preparedness

Personnel agencies—government
Personnel boards—government
Purchasing and supply agencies—gov-
ernment
Supply agencies—government

PUBLIC ADMINISTRATION

337

Major Group 92.—JUSTICE, PUBLIC ORDER, AND SAFETY*The Major Group as a Whole*

This major group includes government establishments engaged in justice, public order and safety.

Group Industry
No. No.

921 COURTS**9211 Courts**

Courts of law are classified here.

Chancery courts
Circuit courts
City courts
Common pleas courts
County courts
Courts of appeal
Courts of customs and patent appeals
Courts of ordinary
Criminal courts
District courts
Family courts
General courts
Inferior courts
Juvenile courts
Landlord-tenant courts
Magistrate courts
Mayors' courts

Military courts
Municipal courts
Orphans' courts
Parish courts
People's courts
Police courts
Probate courts
Quarterly courts
Recorders courts
Small claims courts
Superior courts
Supreme courts
Surrogates' courts
Territorial courts
Town courts
Traffic courts

922 PUBLIC ORDER AND SAFETY**9221 Police Protection**

Establishments primarily engaged in law enforcement, traffic safety, police and other activities related to the enforcement of the law and preservation of order. National Guard is classified in Industry 9711; the prosecution function is classified in Industry 9222.

Federal Bureau of Investigation
Police departments
Sheriffs' offices

State highway patrols
State police

9222 Legal Counsel and Prosecution

Establishments primarily engaged in providing legal counsel to or prosecution for their governments and operation or administration of crime prevention programs.

Attorneys general offices
District attorneys' offices
Legal counsel offices—government

Public defenders' offices
Public prosecutors' offices
U.S. attorneys' offices

9223 Correctional Institutions

Institutions for the confinement and correction of offenders sentenced by a court. Half-way houses for ex-convicts and homes for delinquents or other persons that are not under court orders are classified in Industry 8361.

Correctional institutions
Detention centers
Honor camps
Houses of correction
Jails

Lockups
Penitentiaries
Prison farms
Prisons
Reformatories

9224 Fire Protection

Fire departments, fire fighting organizations and other related fire protection activities.

Fire departments, including volunteer
Fire marshals' offices

Fire prevention offices—government

445-987-72-22

STANDARD INDUSTRIAL CLASSIFICATION

922

9229 Public Order and Safety, Not Elsewhere Classified

Law Enforcement Assistance Administration (LEAA)

Public safety bureaus

PUBLIC ADMINISTRATION

339

**Major Group 93.—PUBLIC FINANCE, TAXATION, AND
MONETARY POLICY***The Major Group as a Whole*

This major group includes establishments engaged in public finance, taxation, and monetary policy.

Group Industry
No. No.

931 PUBLIC FINANCE, TAXATION, AND MONETARY POLICY

9311 Public Finance, Taxation, and Monetary Policy

Establishments primarily engaged in financial administration and taxation including monetary policy; tax administration; collection, custody and disbursement of funds; debt and investment administration; government employee retirement and other trust funds; and the like. Income maintenance program administration is classified in Industry 9441.

Budget agencies
Controllers' offices—government
Customs Bureau
Federal Reserve Board
Internal Revenue Service

International Monetary Fund
Property tax assessors' offices
State tax commissions
Taxation departments
Treasurers' offices—government

STANDARD INDUSTRIAL CLASSIFICATION

The Major Group as a Whole

Group No.	Industry No.
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9411 Administration of Educational Programs

County supervisors of education, except school boards
Education offices, nonoperating

State education departments
Teacher certification bureaus

9431 Administration of Public Health Programs

Cancer detection program administration
Categorical health program administration
Communicable disease program administration
Environmental health programs

Health statistics centers
Immunisation program administration
Maternity and child health program
administration
Mental health agencies—government
Public health agencies

9441 Administration of Social, Manpower, and Income Maintenance Programs

Equal employment opportunities offices
Medical assistance program administration
Office of Economic Opportunity
Public welfare administration, nonoperating

**Social Security Administration
Unemployment insurance offices
Women's bureaus
Workman's compensation offices**

PUBLIC ADMINISTRATION

341

Group Industry
No. No.

945 ADMINISTRATION OF VETERANS' AFFAIRS, EXCEPT HEALTH AND INSURANCE

9451 Administration of Veterans' Affairs, Except Health and Insurance

Establishments primarily engaged in administration of programs of assistance, training, counseling, and other services to veterans and their dependents, heirs or survivors. Also included are offices that maintain liaison and coordinate activities with other service organizations and governmental agencies. Veterans' hospitals are classified in Group 806 and veterans' insurance in Major Group 68.

Veterans' affairs offices

Major Group 95.—ADMINISTRATION OF ENVIRONMENTAL QUALITY AND HOUSING PROGRAMS

The Major Group as a Whole

This major group includes government establishments engaged in the administration of environmental quality and housing programs.

Group No. Industry No.

951 ADMINISTRATION OF ENVIRONMENTAL QUALITY PROGRAMS

9511 Air and Water Resource and Solid Waste Management

Establishments primarily engaged in regulation, planning, protection and conservation of air and water resources; solid waste management; water and air pollution control and prevention; flood control, and drainage development, and consumption of water resources; coordination of these activities at intergovernmental levels; research necessary for control and conservation of water resources and air pollution abatement. Water systems are classified in Industry 4941. Sewage and refuse systems and other sanitary services are classified in Group 495. Irrigation systems are classified in Industry 4971.

Environmental protection agencies
Environmental quality and control agencies
Pollution control agencies

Sanitary engineering agencies—government
Waste management program administration
Water control and quality agencies

9512 Land, Mineral, Wildlife, and Forest Conservation

Establishments primarily engaged in regulation, supervision and control of land use, including recreational areas; conservation and preservation of natural resources; control of wind and water erosion; and the administration and protection of publicly and privately owned forest lands, including pest control. Planning, management, regulation, and conservation of game, fish, and wildlife populations, including wildlife management areas and field stations; and other matters relating to the protection of fish, game, and wildlife are also classified here. Parks are classified in Industry 7900. Operation of forest property is classified in Industry 0811. Operation of game or fish preserves is classified in Industry 0921.

Conservation and stabilization agencies
Fish and wildlife conservation
Game and inland fish agencies
Land management agencies—government
Recreational program administration

Soil conservation services
Wildlife conservation agencies—government
Wind and water erosion control agencies

953

ADMINISTRATION OF HOUSING AND URBAN DEVELOPMENT PROGRAMS

9531 Administration of Housing Programs

Establishments primarily engaged in the planning, administration, and research for housing programs. Insurance and finance are classified in Division H. The operation and rental of apartments and houses is classified in Group 851.

Building standards agencies
Housing agencies
Housing authorities—nonoperating

Planning and development of housing programs

9532 Administration of Urban Planning and Community and Rural Development

Establishments primarily engaged in planning, administration, and research for the development of urban and rural areas, including programs for slum clearance, community redevelopment, urban renewal and land clearance. Also included are zoning boards and commissions.

Community development agencies—government
County development agencies
Model cities agencies—government

Redevelopment land agencies
Urban planning commissions
Urban renewal agencies
Zoning boards and commissions

PUBLIC ADMINISTRATION

343

Major Group 96.—ADMINISTRATION OF ECONOMIC PROGRAMS*The Major Group as a Whole*

This major group includes government establishments engaged in the administration of economic programs.

Group Industry
No. No.

961 ADMINISTRATION OF GENERAL ECONOMIC PROGRAMS**9611 Administration of General Economic Programs**

Establishments primarily engaged in promotion and development of economic resources of all kinds, including tourism, business, and industry. Included are establishments responsible for the development of general statistical data and analyses and promotion of the general economic well-being of the Nation. The Atomic Energy Commission is classified here, except the utility regulatory activities which are classified in Industry 9631 and defense activities which are classified in Industry 9711.

Atomic Energy Commission, except inspection and defense
Bureau of Labor Statistics
Census Bureau
Consumer protection offices—government

Councils of economic advisers
Economic development agencies
National Science Foundation
Small Business Administration
Trade commissions

962 REGULATION AND ADMINISTRATION OF TRANSPORTATION PROGRAMS**9621 Regulation and Administration of Transportation Programs**

Establishments primarily engaged in regulation, licensing, planning, and inspection of transportation services and facilities. Motor vehicle and operator licensing is classified here. The Coast Guard is included here. Parking authorities are classified here, but the operation of lots is classified in Group 752. Operation of railroads, subways, depots, ports, toll roads and bridges, and other transportation facilities are classified in Division E. Highway construction and maintenance is classified in Industry 1611.

Bureau of Public Roads
Coast Guard
Federal Aviation Administration, including control tower operation
Interstate Commerce Commission
Motor vehicle licensing and inspection offices

Port authorities and districts, nonoperating
Railroad and warehouse commissions
Transit systems and authorities, nonoperating
Transportation departments—government

963 REGULATION AND ADMINISTRATION OF COMMUNICATION, ELECTRIC, GAS, AND OTHER UTILITIES**9631 Regulation and Administration of Communication, Electric, Gas, and Other Utilities**

Establishments primarily engaged in regulation, licensing and inspection of communication, electric (including atomic), gas, water, sewer, and other utilities. Operation of utilities is classified in Division E. The U.S. Postal Service is classified in Industry 4811.

Atomic energy inspection and regulation offices
Federal Communications Commission
Irrigation districts, nonoperating
Licensing and inspection of utilities

Mosquito eradication districts
Public utility commissions
Regulation of utilities
Sanitary districts—nonoperating

STANDARD INDUSTRIAL CLASSIFICATION

Group No.	Industry No.	
964	9641	REGULATION OF AGRICULTURAL MARKETING AND COMMODITIES Regulation of Agricultural Marketing and Commodities Establishments primarily engaged in the planning, administration, and coordination of agricultural programs for production, marketing, and utilization, including related research, educational, and promotional activities. Establishments responsible for regulating and controlling the grading, inspection, and warehousing of agricultural products; the grading and inspection of foods; and the handling of plants and animals are classified here. Establishments responsible for developing economic data about agriculture and trade in agricultural products are classified in Industry 9611; conservation of agricultural resources in Industry 9612; and programs to provide food to people in Industry 9441. <div> <div>Agriculture extension services Agriculture fair boards Commodity exchange authorities Food inspection agencies</div> <div>Marketing and consumer services—government Regulation and inspection of agricultural products</div> </div>
965	9651	REGULATION, LICENSING, AND INSPECTION OF MISCELLANEOUS COMMERCIAL SECTORS Regulation, Licensing, and Inspection of Miscellaneous Commercial Sectors Establishments primarily engaged in regulation, licensing, and inspection of other commercial sectors, such as retail trade, professional occupations, manufacturing, mining, construction and services. Maintenance of physical standards, regulating hazardous conditions not elsewhere classified, and alcoholic beverage control are classified here. <div> <div>Alcoholic beverage control boards Bureaus of standards Inspection for labor standards and safety Insurance commissions Labor-management negotiations boards Licensing and permit for professional occupations Licensing and permit for retail trade</div> <div>Minimum wage program administration Price control agencies Rent control agencies Securities regulation commissions State watchmakers' board Wage control agencies Work safety and health program administration</div> </div>
966	9661	SPACE RESEARCH AND TECHNOLOGY Space Research and Technology Establishments primarily engaged in programs for manned and unmanned space flights, space exploration, and the like. Research and developmental laboratories operated by National Aeronautics and Space Administration are classified as auxiliaries to this industry. <div>National Aeronautics and Space Administration</div>

PUBLIC ADMINISTRATION

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**Major Group 97.—NATIONAL SECURITY AND
INTERNATIONAL AFFAIRS***The Major Group as a Whole*

This major group includes government establishments engaged in national security and international affairs.

Group No. Industry No.

971 NATIONAL SECURITY**9711 National Security**

Army, Navy, Air Force, Marine Corps, National Guard, Civil Defense and the like. Establishments primarily engaged in manufacturing ordnance, ships and other military goods are classified in Division D. Military Air Transport Service is classified in Industry 4521 and Military Sea Transportation is classified in Industry 4411. Service academies are classified in Industry 8221, but military training schools are classified here. Military hospitals are classified in Group 806, and the Coast Guard in Industry 9621.

Air Force
Army
Civil Defense
Marine Corps

Military training schools
National Guard
Navy

972 INTERNATIONAL AFFAIRS**9721 International Affairs**

Establishments primarily engaged in international affairs including Action, Agency for International Development, Department of State; and programs relating to other nations and peoples.

AID (Agency for International Development)
Action
Consular Service
Diplomatic Service

Overseas Private Investment Corporation
Peace Corps
State Department
United States Information Service

Division K
Nonclassifiable Establishments

347

This major group includes establishments which cannot be classified in any other industry. Establishments which can be classified in a division should be classified in the most appropriate industry within that division.

Group No.	Industry No.
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NONCLASSIFIABLE ESTABLISHMENTS

9999 Nonclassifiable Establishments

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- 0711 Soil preparation services

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 6028 Banks, private (unincorporated): not insured
 5999 Banner shops—retail
 8621 Bar associations
 7231 Barber and beauty shops, combined
 7241 Barber colleges
 5087 Barber shop equipment and supplies—wholesale
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 0849 Barks, gathering of
 0119 Barley farms
 5085 Barrels, new and reconditioned—wholesale
 5813 Bars (drinking places)
 8641 Bars and restaurants, owned and operated for members of organizations only
 5051 Bars, concrete reinforcing—wholesale
 5051 Bars, metal—wholesale
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- 1411 Basalt, dimension—quarrying
 7369 Base maintenance (providing personnel on continuing basis)
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 7999 Baseball instruction schools
 7941 Basketball clubs
 7999 Basketball instruction schools
 1099 Bastnasite ore mining
 7999 Bath houses, independently operated
 7997 Bathing beaches, membership
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 7299 Baths, turkish
 7399 Batik work (hand painting on textiles)
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 5013 Batteries, automotive—wholesale
 5931 Batteries, automotive: secondhand—retail
 5063 Batteries, storage: industrial—wholesale
 5531 Battery dealers, automobile—retail
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 7999 Beach chairs and accessories, rental
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 0119 Bean (dry field and seed) farms
 0723 Bean cleaning
 4221 Bean cleaning and warehousing
 4221 Bean elevators, except sales
 4221 Bean warehouses, except sales
 5812 Beaneries
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 5153 Beans, inedible—wholesale
 5153 Beans, unshelled—wholesale
 5051 Bearing piles, iron and steel—wholesale
 5085 Bearings—wholesale
 7231 Beauticians
 7231 Beauty and barber shops, combined
 7231 Beauty culture schools
 5087 Beauty parlor equipment and supplies—wholesale
 7231 Beauty shops
 7299 Beauty spas
 5719 Bedding (sheets, blankets, spreads, and pillows)—retail
 5712 Beds and springs—retail
 5023 Bedspreads—wholesale
 5021 Bedsprings—wholesale
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 0212 Beef cattle farms, except feedlots
 0211 Beef cattle feedlots
 5921 Beer and liquor (packaged)—retail
 5181 Beer and other fermented malt liquors—wholesale
 5813 Beer gardens (drinking places)
 7699 Beer pump coil cleaning and repair service
 0133 Beet (sugar) farms
 0161 Beet farms, except sugar beet
 5134 Belt and buckle assembly kit—wholesale
 4013 Belt line railroads
 5085 Belting, hose, and packing: industrial—wholesale
 5699 Belts, apparel: custom—retail
 6311 Benevolent insurance associations
 1452 Bentonite mining
 0782 Bermuda sprigging services
 0722 Berries, machine harvesting of
 0171 Berry farms
 1099 Beryl mining
 1099 Beryllium ore mining
 8611 Better business bureaus
 5149 Beverage concentrates—wholesale
 5078 Beverage coolers—wholesale
 8299 Bible schools, not operated by churches
 5963 Bibles, house-to-house selling
 5941 Bicycle and bicycle parts dealers, except motorized—retail
 7999 Bicycle rental
 7699 Bicycle repair shops
 5041 Bicycle tires and tubes—wholesale
 5041 Bicycles—wholesale
 5571 Bicycles, motorized—retail
 7312 Bill posting, advertising
 7312 Billboard advertising
 7932 Billiard parlors
 8931 Billing and bookkeeping service
 5134 Binding, textile—wholesale
 7699 Binoculars and other optical goods repair
 5999 Binoculars—retail
 8071 Biological laboratories (not manufacturing)
 5122 Biologicals and allied products—wholesale
 7342 Bird proofing
 7299 Birth certificate agencies
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 1211 Bituminous coal cleaning plants
 1211 Bituminous coal crushing
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- 1211 Bituminous coal stripping, except on a contract, fee, or other basis
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 1629 Blasting contractors, except building demolition
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 1799 Boiler and pipe, insulation of: contractors
 1711 Boiler erection and installation—contractors
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 7699 Boiler repair shops (not manufacturing)
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 8931 Bookkeeping and billing services
 7999 Bookmakers, race
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 5961 Books, mail order—retail
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 5149 Bottling mineral or spring water—wholesale
 5182 Bottling wines and liquors—wholesale
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 7933 Bowling alleys
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 7699 Bowling pins, refinishing or repair
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 5063 Boxes and fittings, electrical—wholesale
 5085 Boxes, crates, etc., other than paper—wholesale
 5113 Boxes, paper—wholesale
 5093 Boxes, waste—wholesale
 8641 Boy Scout organizations
 7032 Boys' camps
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 5072 Brads—wholesale
 7539 Brake linings, sale and installation
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 5074 Brass goods, plumbers'—wholesale
 7692 Brasing (welding)
 1111 Breakers, anthracite
 5149 Breakfast cereals—wholesale
 1629 Breakwater construction—general contractors
 0752 Breeding of animals other than cattle, hogs, sheep, goats, and poultry
 0751 Breeding of livestock, except animal specialties
 5211 Brick and tile dealers—retail
 5039 Brick—wholesale
 5931 Brick, used only—retail
 1741 Bricklaying—contractors
 5621 Bridal shops, except custom—retail
 1622 Bridge (vehicular, pedestrian, etc.) construction—general contractors
 7997 Bridge clubs, membership
 7999 Bridge clubs, nonmembership
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 1721 Bridge painting—contractors
 4784 Bridges, highway: operation of
 1611 Bridle path construction—general contractors
 1477 Brimstone mining
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 4833 Broadcasting stations, television
 0251 Broiler chickens, raising of
 7399 Brokers, business (buying and selling business enterprises)
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 6163 Brokers, farm or business loan
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 7399 Bronzing baby shoes
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 5159 Broomcorn—wholesale
 5719 Brooms—retail
 1211 Brown coal mining
 1011 Brown ore mining
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 1629 Brush clearing or cutting—general contractors
 5719 Brushes—retail
 5963 Brushes, house-to-house or party-plan selling
 5085 Brushes, industrial—wholesale
 0119 Buckwheat farms
 9311 Budget agencies
 5812 Buffets (eating places)
 1531 Builders, operative: on own account
 1531 Builders, speculative
 5072 Builders' hardware—wholesale
 1541 Building alterations, industrial and warehouse—general contractors
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 1522 Building alterations, other residential—general contractors
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 1522 Building construction, other residential—general contractors
 1531 Building construction, single-family—general contractors
 1791 Building front installation, metal—contractors
 7349 Building maintenance, except repairs
 5211 Building materials dealers—retail
 5039 Building materials, fiberglass—wholesale
 5931 Building materials, used—retail
 1339 Building oil and gas well foundations on site: on a contract basis
 1541 Building repairs, industrial—general contractors
 1542 Building repairs, other nonresidential—general contractors
 1522 Building repairs, other residential—general contractors
 1531 Building repairs, single family—general contractors
 9531 Building standards agencies
 5039 Building stone—wholesale
 6513 Buildings, apartment (5 or more housing units): operators of
 6514 Buildings, dwelling (4 or fewer housing units): operators of
 6512 Buildings, nonresidential: operators of
 5211 Buildings, prefabricated—retail
 5191 Bulbs, flower and field—wholesale
 0131 Bulbs, growing of
 5261 Bulbs, seeds, and nursery stock—retail
 1041 Bullion, gold: produced at mine, mill or dredge site
 1044 Bullion, silver: produced at mine or mill site
 7331 Bumpshops (automotive repair)
 9611 Bureau of Labor Statistics
 9621 Bureau of Public Roads
 9651 Bureau of Standards
 1731 Burglar alarm installation—contractors
 7333 Burglar alarm maintenance and monitoring
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 7393 Burglary protection service
 6311 Burial insurance societies
 5199 Burlap—wholesale
 7923 Burlesque companies
 1453 Burley mining
 5974 Burners: fuel oil and distillate oil—wholesale
 0272 Burro farms
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5063 Bus bars and trolley ducts—wholesale
 7319 Bus card advertising
 4143 Bus charter service, except local
 4141 Bus charter service, local
 4111 Bus line operation, local
 4131 Bus lines, intercity
 4171 Bus terminal operation
 4722 Bus ticket offices, not operated by transportation companies
 7392 Business analysts
 8611 Business associations, other than civic and social
 7399 Business brokers (buying and selling business enterprises)
 8244 Business colleges and schools, not of college grade
 7392 Business consultants
 6153 Business credit institutions, short-term
 7392 Business economists
 5112 Business forms—wholesale
 7629 Business machine repair (electric)
 5031 Business machines and equipment—wholesale
 7392 Business research service
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 8641 Businessmen's clubs, civic and social
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 4151 Buses, school: operation of
 4119 Buses, sightseeing: operation of
 1321 Butane (natural) production
 5934 Butane gas, bottled—retail
 5172 Butane gas, except bulk stations and terminals—wholesale
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 5159 Buyers of raw farm products, except cotton, grain, and livestock—wholesale
 6631 Buying agents, real estate
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5813 Cabarets
 0161 Cabbage farms
 7032 Cabin camps
 5712 Cabinet work on a custom basis to individual order—retail
 5712 Cabinets, kitchen: not built in—retail
 5211 Cabinets, kitchen: to be installed—retail
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- 5063 Cable conduit—wholesale
 1623 Cable laying construction—general contractors
 7999 Cable lifts, amusement or scenic, operated separately from lodges
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 4811 Cable service, telephone: land or submarine
 1799 Cable splicing service, nonelectrical—contractors
 1781 Cable splicing, electrical—contractors
 5051 Cable, wire: not insulated—wholesale
 4899 Cablevision service, rental to homes
 4789 Cabs, horse drawn: for hire
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 1629 Caisson drilling—general contractors
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 1041 Calaverite mining
 1422 Calcareous tufa, crushed and broken—quarrying
 1411 Calcareous tufa, dimension—quarrying
 5198 Calcimines—wholesale
 1499 Calcite mining
 7374 Calculating service (computer)
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 1799 Calking (construction)—contractors
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 5946 Camera shops—retail
 5043 Cameras, equipment, and supplies—wholesale
 7033 Camp sites for transients
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 5012 Campers (pickup coaches) for mounting on trucks—wholesale
 7519 Campers (recreational vehicles), rental
 7033 Campgrounds
 5941 Camping equipment—retail
 7032 Camps, sporting and recreational
 7011 Camps, tourist
 4441 Canal barge operation
 1629 Canal construction—general contractors
 4464 Canal operation
 4441 Canal transportation
 9431 Cancer detection program administration
 5441 Candy stores—retail
 5145 Candy—wholesale
 0133 Cane (sugar) farms
 5149 Canned goods: fruits, vegetables, fish, seafoods, meats, milk—wholesale
 7999 Canoe rental
 5085 Cans for fruits and vegetables—wholesale
 0161 Cantaloupe and other melon farms
 5199 Canvas products—wholesale
 5963 Canvassers (door-to-door), headquarters for retail sale of merchandise
 5136 Caps, men's and boys'—wholesale
 7319 Car carding service
 4452 Car lighters (ferries)
 4789 Car loading
 6159 Car or auto finance leasing
 7512 Car or auto leasing, without drivers, except finance (equity) leasing
 7299 Car title and tag service to individuals
 5087 Car wash equipment and supplies—wholesale
 7542 Car washes, self-service or automatic
 7539 Carburetor repair
 7319 Card advertising
 5113 Cardboard and products—wholesale
 4511 Cargo carriers, air: certificated
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 4782 Cargo checkers and surveyors, marine
 4469 Cargo salvaging, from distressed vessels
 7999 Carnival operation
 1094 Carnotite mining
 1751 Carpentry work—contractors
 7217 Carpet and furniture cleaning on location
 7217 Carpet cleaning and repairing plants
 7217 Carpet cleaning on customers' premises
 1752 Carpet laying or removal service—contractors
 5713 Carpet stores—retail
 5023 Carpets—wholesale
 4789 Carriages, horse drawn: for hire
 5812 Carry-out restaurants—retail
 5511 Cars, new and used—retail
 4212 Carting, by truck or horse drawn wagon
 7813 Cartoon motion picture production, except for TV
 7814 Cartoon production, television
 0119 Cash grain farms: except wheat, rice, corn, and soybeans
 5081 Cash registers—wholesale
 1321 Casing-head butane and propane production
 5051 Cast iron pipe—wholesale
 7819 Casting bureaus, motion picture
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 6331 Casualty insurance and reinsurance

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0279	Cat farms	1021	Chalcocite mining
5961	Catalog (order taking) offices of mail order houses—retail	1021	Chalcopyrite mining
7699	Catch basin cleaning	1422	Chalk mining, crushed and broken—quarrying
0751	Catching poultry, with no hauling	1422	Chalk, ground or otherwise treated
9481	Categorical health program administration	8611	Chambers of commerce
5812	Caterers	9211	Chancery courts
0279	Catfish farms	1629	Channel construction—general contractors
1499	Catlinite mining	1629	Channel cutoff construction—general contractors
0211	Cattle feeding farms	5199	Charcoal—wholesale
0211	Cattle feedlot operation	7399	Charge account service (shopping plates)—collection by individual firms
0212	Cattle raising farms	6732	Charitable trusts, management of
0212	Cattle ranches	8299	Charm schools
0751	Cattle spraying	7333	Chart and graph design
5154	Cattle—wholesale	4469	Chartering of commercial boats
1622	Causeway construction (built on structural supports)—general contractors	7361	Chauffeur registries
5161	Caustic soda—wholesale	6059	Check cashing agencies
7999	Cave operation	7299	Check room concessions or services
1761	Ceilings, metal: erection and repair—contractors	4782	Checkers, marine cargo
0161	Celery farms	5451	Cheese stores—retail
1479	Celestite mining	4222	Cheese warehouses
1741	Cement block laying—contractors	5143	Cheese—wholesale
5211	Cement dealers—retail	5133	Cheesecloth, woven—wholesale
5084	Cement making machinery—wholesale	5161	Chemical bulk stations and terminals—wholesale
1422	Cement rock, crushed and broken—quarrying	1629	Chemical complex or facilities construction—general contractors
5039	Cement—wholesale	7391	Chemical laboratories, except testing (not manufacturing auxiliaries)
1389	Cementing oil and gas well casings: on a contract basis	0711	Chemical treatment of soil
6553	Cemeteries—real estate operation	1389	Chemically treating wells: on a contract basis
6553	Cemetery associations	5191	Chemicals, agricultural—wholesale
6531	Cemetery management service	5161	Chemicals, industrial and heavy—wholesale
0782	Cemetery upkeep, independent	8071	Chemists, biological (not manufacturing), laboratories of
9611	Census Bureau	8999	Chemists, consulting: not connected with business service laboratories
8231	Centers for documentation	0849	Cherry gum, gathering of
8321	Centers for senior citizens	0175	Cherry orchards and farms
1629	Central station (light and powerplant) construction—general contractors	0173	Chestnut groves and farms
8299	Ceramic schools	0849	Chestnut gum, gathering of
1099	Cerium ore mining	5145	Chewing gum—wholesale
1031	Cerrusite mining	5194	Chewing tobacco—wholesale
8931	Certified public accountants	0252	Chicken egg farms
7699	Cesspool cleaning	0251	Chicken farms or ranches (raising for slaughter)
1711	Cesspool construction—contractors	0254	Chicken hatcheries
5251	Chainsaws—retail	5159	Chicks—wholesale
5084	Chainsaws—wholesale	8351	Child care centers
5086	Chairs, dental—wholesale		
5087	Chairs, hydraulic: beauty and barber shop—wholesale		
5021	Chairs: household, office, and public building—wholesale		

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- 8321 Child guidance agencies
 8361 Children's boarding homes
 7911 Children's dancing schools
 8361 Children's homes
 8069 Children's hospitals
 8361 Children's villages
 5641 Children's wear stores—retail
 7349 Chimney cleaning service
 1741 Chimney construction and maintenance—contractors
 1455 China clay mining
 7699 China firing and decorating to individual order
 5719 China stores—retail
 5023 China—wholesale
 0271 Chinchilla farms
 7219 Chinese hand laundries
 8049 Chiropodists, offices of
 8041 Chiropactors, offices of
 5149 Chocolate—wholesale
 0722 Chopping and silo filling
 8999 Christian Science lecturers
 8049 Christian Science practitioners, offices of
 8699 Christian Science reading rooms
 5261 Christmas trees (natural)—retail
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 5993 Cigar stores and stands—retail
 5194 Cigarettes—wholesale
 5962 Cigarettes, sale by vending machine
 5194 Cigars—wholesale
 5039 Cinders—wholesale
 1092 Cinnabar mining
 5063 Circuit breakers—wholesale
 9211 Circuit courts
 7392 Circuit management service for motion picture theaters
 7319 Circular distributing service
 8231 Circulating libraries
 7999 Circus companies
 8641 Citizens' unions
 0721 Citrus grove cultivation
 0762 Citrus grove management and maintenance, with or without crop services
 0174 Citrus groves and farms
 5084 Citrus processing machinery—wholesale
 4111 City and suburban bus line operation
 9121 City and town councils
 9111 City and town managers' offices
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 9211 City courts
 7392 City planners (except professional engineering)
 8641 Civic associations
 1542 Civic center construction: general contractors
 9711 Civil defense
 9199 Civil rights commissions
 9199 Civil service commissions
 8299 Civil service schools
 6411 Claim adjusters, insurance: not employed by insurance companies
 0913 Clams, digging of
 7929 Classical music groups or artists
 1459 Clays (common) quarrying—not in conjunction with manufacturing
 1541 Clean room construction—general contractors
 7212 Cleaners, not operating own dry cleaning plants
 7216 Cleaning and dyeing plants, except rug cleaning
 7212 Cleaning and laundry pickup stations, not owned by laundries or cleaners
 7542 Cleaning and polishing (detailing) new autos, contract service for dealers
 7699 Cleaning and reglazing of baking pans
 7217 Cleaning and repairing plants, rug and carpet
 7699 Cleaning bricks
 1799 Cleaning building exteriors—contractors
 1389 Cleaning lease tanks, oil field: on a contract basis
 1799 Cleaning new buildings after construction—contractors
 5149 Cleaning of dry foods and spices—wholesale
 4742 Cleaning of railroad cars
 1211 Cleaning plants, bituminous coal
 0751 Cleaning poultry coops
 4789 Cleaning railroad ballast
 1389 Cleaning wells: on a contract basis
 1629 Clearing of land—general contractors
 6055 Clearinghouse associations, city or regional
 6281 Clearinghouses, commodity exchange
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 8081 Clinics, not operated by groups of licensed health practitioners
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 7631 Clock repair shops
 5094 Clocks—wholesale
 5944 Clocks, including custom made—retail

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- 5113 Closures, paper—wholesale
 7399 Cloth cutting, bolting, or winding: for textile distributors
 5064 Clothes driers, household: electric or gas—wholesale
 5199 Clothes hangers—wholesale
 5137 Clothing accessories, women's, children's, and infants'—wholesale
 7219 Clothing alteration and repair shops
 7299 Clothing rental
 5651 Clothing stores, family—retail
 5611 Clothing stores, men's and boys'—retail
 5931 Clothing stores, secondhand—retail
 5136 Clothing, men's and boys'—wholesale
 5621 Clothing, ready-to-wear: women's—retail
 5137 Clothing: women's, children's and infants'—wholesale
 8999 Cloud seeding
 0139 Clover farms
 7997 Clubs, membership: sports and recreation
 5932 Coal dealers—retail
 1111 Coal mining, anthracite
 1211 Coal mining, bituminous
 1211 Coal mining, brown
 1211 Coal mining, hard, except Pennsylvania anthracite
 1211 Coal mining, semianthracite
 1211 Coal mining, subbituminous
 4619 Coal pipe line operation
 5161 Coal tar products, primary and intermediate—wholesale
 5052 Coal—wholesale
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 4422 Coastwise transportation
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 1799 Coating of concrete structures with plastic—contractors
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 5081 Coffee urns, commercial—wholesale
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 1629 Cofferdam construction—general contractors
 4119 Cog railways
 7694 Coil winding service
 5999 Coin shops—retail, except mail order
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 5099 Coin-operated game machines—wholesale
 7215 Coin-operated laundries
 7215 Coin-operated laundry and dry cleaning routes
 7394 Coin-operated machine rental
 5932 Coin-operated machines selling merchandise
 5081 Coin-operated phonographs and vending machines—wholesale
 7299 Coin-operated service machine operation: scales, shoe shine, lockers
 5961 Coins, mail order—retail
 1629 Coke oven construction—general contractors
 4925 Coke oven gas, production and distribution
 4925 Coke ovens, byproduct: operated for manufacture or distribution of gas
 5052 Coke—wholesale
 4223 Cold storage locker rental
 5078 Cold storage machinery—wholesale
 1541 Cold storage plant construction: general contractors
 4222 Cold storage warehousing
 1474 Colemanite mining
 7211 Collecting and distributing agencies, laundry: operated by power laundries
 7216 Collecting and distributing agencies, operated by cleaning plants
 7212 Collecting and distributing agents, laundry and dry cleaning
 4212 Collecting and transporting refuse, without disposal
 7321 Collection agencies (accounts), except for real estate
 7299 College clearinghouses
 8221 Colleges, except junior
 5198 Colors and pigments—wholesale
 1061 Columbite mining
 6611 Combinations of real estate, insurance, loans, and law offices
 0722 Combining
 7299 Comfort station operation
 6512 Commercial and industrial buildings, operators of
 7333 Commercial art and illustration
 8249 Commercial art schools
 6023 Commercial banks, State: insured—not members of Federal Reserve System
 6022 Commercial banks, State: members of Federal Reserve System
 6024 Commercial banks, State: not insured—not members of Federal Reserve

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 6153 Commercial paper and accounts receivable, purchasers of
 7333 Commercial photography
 8244 Commercial schools, not of college grade
 5112 Commercial stationers (not printers)—wholesale
 1541 Commercial warehouse construction: general contractors
 7814 Commercials, television: tape or film
 5812 Commissary restaurants
 **** Commission merchants, commodity: wholesale—code according to commodity
 6221 Commodity brokers (contracts)
 6131 Commodity Credit Corporation
 6221 Commodity dealers (contracts)
 9641 Commodity exchange authorities
 6231 Commodity exchanges
 **** Commodity or merchandise brokers and dealers—code according to commodity
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 9211 Common pleas courts
 1442 Common sand mining
 9431 Communicable disease program administration
 1731 Communication equipment installation—contractors
 5063 Communication equipment—wholesale
 4899 Communication services, except telephone, videophone, telegraph, radio, TV
 8399 Community action agencies
 8321 Community centers
 8399 Community chests
 8222 Community colleges (junior)
 9532 Community development agencies—government
 8399 Community development groups
 8641 Community membership clubs, other than amusement and recreation clubs
 5075 Compressors, air conditioning—wholesale
 5064 Compressors, except air conditioning—wholesale
 7379 Computer and data processing equipment repair and maintenance
 7379 Computer brokers (operating on fee basis)
 7379 Computer consultants
 7374 Computer facilities management
 7374 Computer input-output service
 7374 Computer management contracting
 7372 Computer programming services
 7379 Computer rental and leasing, except finance leasing or by the manufacturer
 7372 Computer software
 7372 Computer systems analysis and design
 7374 Computer time brokerage
 7374 Computer time sharing
 5081 Computers and peripheral equipment—wholesale
 5052 Concentrates, metallic—wholesale
 7929 Concert artists
 7922 Concert management service
 7929 Concert organizations
 7999 Concession operators, amusement devices and rides
 5161 Concrete additives—wholesale
 6211 Concrete and cinder block dealers—retail
 5039 Concrete and cinder block—wholesale
 1795 Concrete breaking for streets and highways—contractors
 5039 Concrete building products—wholesale
 1771 Concrete construction except paving and foundation—contractors
 1611 Concrete construction: roads, highways, and streets—general contractors
 5082 Concrete processing equipment—wholesale
 1791 Concrete reinforcement, placing of—contractors
 5051 Concrete reinforcing bars—wholesale
 1321 Condensate production, cycle (natural gas)
 5075 Condensing units, air conditioning—wholesale
 1531 Condominium developers on own account
 1623 Conduit construction—general contractors
 5063 Conduits and raceways—wholesale
 5441 Confectionery produced for direct sale on the premises—retail
 5441 Confectionery stores—retail
 5145 Confectionery—wholesale
 9121 Congress
 9512 Conservation and stabilization agencies
 7394 Construction equipment rental
 5082 Construction machinery and equipment—wholesale
 5063 Construction materials, electrical: interior and exterior—wholesale
 1442 Construction sand mining
 1623 Construction: bridges, tunnels, and elevated highways—general contractors
 1623 Construction: water, sewer, pipeline, power line, etc.—general contractors

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STANDARD INDUSTRIAL CLASSIFICATION

9721	Consular service	1459	Cornwall stone mining
8999	Consultants, nuclear, not connected with business service laboratories	7392	Corporation organizers
7392	Consulting service, except computer related or professional engineering	7399	Correct time service
7321	Consumer credit reporting bureaus	9223	Correctional institutions
9611	Consumer protection offices—government	8241	Correspondence schools, including branch offices and solicitors
5113	Containers, paper—wholesale	5631	Corset and lingerie stores—retail
8611	Contractors' associations	7219	Corset repair shops
7399	Contractors' disbursement control	7399	Corset representatives, fitting only
9311	Controllers' offices—government	5137	Corsets—wholesale
5084	Controlling instruments and accessories—wholesale	1499	Corundum mining
8059	Convalescent homes with health care	7399	Cosmetic kits—lip and eye makeup (assembling and packaging)
5074	Convectors—wholesale	5999	Cosmetics stores—retail
7399	Convention decorators	5122	Cosmetics—wholesale
8661	Convents	5963	Cosmetics, house-to-house or party-plan selling
1796	Conveyor system installation—contractors	5631	Costume accessories: handbags, costume jewelry, gloves, etc.—retail
5084	Conveyor systems—wholesale	7923	Costume design, theatrical
5081	Cooking equipment, commercial—wholesale	5631	Costume jewelry stores—retail
5149	Cooking oils—wholesale	7299	Costume rental
5719	Cookware—retail	4221	Cotton compresses and warehouses
4961	Cooled air suppliers	0131	Cotton farms
5078	Coolers, beverage—wholesale	0724	Cotton ginning
5078	Coolers, drinking water: mechanical—wholesale	7399	Cotton inspection service, not connected with transportation
4742	Cooling of railroad cars	5152	Cotton merchants, not members of exchanges—wholesale
1531	Cooperative apartment developers on own account	0724	Cotton pickery
6811	Cooperative life insurance organizations	5133	Cotton piece goods, woven—wholesale
5137	Coordinate sets: women's, children's, and infants'—wholesale	7399	Cotton sampler service
1021	Copper ore mining	0723	Cotton seed delinting
5052	Copper ore—wholesale	5199	Cotton yarns—wholesale
5051	Copper sheets, plates, bars, rods, pipes, etc.—wholesale	0722	Cotton, machine harvesting of
1761	Coppersmithing in connection with construction work—contractors	5152	Cotton, raw—wholesale
7699	Coppersmithing, repair work (other than construction)	0131	Cottonseed farms
6794	Copyright buying and licensing	8399	Councils for social agencies, exceptional children, poverty, etc.
7399	Copyright protection service	9611	Councils of economic advisers
5085	Cordage—wholesale	8321	Counseling centers
5199	Cordwood—wholesale	8111	Counselors at law
1799	Core drilling (test borings for building construction)—contractors	1799	Counter top installation—contractors
5145	Corn chips—wholesale	5152	Country buyers of cotton or cotton linters
0723	Corn drying	7997	Country clubs, membership
0115	Corn farms (field corn)	5399	Country general stores—retail
0723	Corn shelling	9121	County commissioners
5153	Corn—wholesale	9211	County courts
0251	Cornish hen farms	9532	County development agencies
		9111	County supervisors' and executives' offices
		9411	County supervisors of education, except school boards
		7319	Coupon distribution

ALPHABETIC INDEX, NONMANUFACTURING INDUSTRIES

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- 7399 Coupon redemption service, except trading stamps
 7396 Coupon stores (redemption of trading stamps)
 7339 Court reporting service
 9211 Courts of appeal
 9211 Courts of customs and patent appeals
 9211 Courts of ordinary
 7011 Courts, auto
 7699 Covering textile rolls
 0119 Cowpea farms
 0913 Crabs, catching of
 0171 Cranberry bogs
 5084 Cranes, industrial—wholesale
 4783 Crating goods for shipping
 5084 Cream separators, except farm—wholesale
 5083 Cream separators, farm—wholesale
 5143 Cream stations—wholesale
 7333 Creative services to advertising industry, except writers
 6351 Credit and other financial responsibility insurance
 7321 Credit bureaus and agencies
 7399 Credit card service (collection by individual firms)
 6153 Credit card service, collection by central agency
 7321 Credit clearinghouses
 6131 Credit institutions, agricultural
 6142 Credit unions, Federal
 6143 Credit unions, State
 7261 Crematories
 0761 Crew leaders, farm labor: contract
 9211 Criminal courts
 5719 Crockery stores—retail
 5023 Crockery—wholesale
 0721 Crop dusting
 0191 Crop farms, general
 0729 Crop services, general
 0721 Crop spraying
 1311 Crude oil production
 5172 Crude oil—wholesale
 4612 Crude petroleum pipe lines
 1311 Crude petroleum production
 0651 Cruising timber
 5084 Crushing machinery and equipment—wholesale
 1211 Crushing plants, bituminous coal
 1499 Cryolite mining
 0161 Cucumber farms
 1111 Culm bank recovery, anthracite: except on a contract basis
 1112 Culm bank recovery, anthracite: on a contract basis
 1211 Culm bank recovery, bituminous coal or lignite: except on a contract basis
 1213 Culm bank recovery, bituminous coal or lignite: on a contract basis
 5083 Cultivating machinery and equipment—wholesale
 0721 Cultivation of sprouts, twigs, etc.
 0721 Cultivation, mechanical and flame
 0919 Cultured pearl production
 1611 Culvert construction—general contractors
 1021 Cuprite mining
 5113 Cups, paper—wholesale
 1611 Curb construction—general contractors
 5047 Curio shops—retail
 0171 Currant farms
 7216 Curtain cleaning and repair
 5714 Curtain stores—retail
 5023 Curtains—wholesale
 6231 Custodians of securities
 7349 Custodians of schools, on a contract basis
 1541 Custom builders, industrial and warehouse—general contractors
 1542 Custom builders, other nonresidential—general contractors
 1522 Custom builders, other residential—general contractors
 1521 Custom builders, single-family houses—general contractor
 4723 Custom house brokers
 5099 Custom tailors—retail
 9311 Customs Bureau
 4712 Customs clearance of freight
 9211 Customs courts
 5992 Cut flowers—retail
 5199 Cut flowers—wholesale
 5719 Cutlery stores—retail
 5072 Cutlery—wholesale
 1629 Cutting right of way—general contractors
 1459 Cyanite mining
 1321 Cycle condensate production (natural gas)

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 5812 Dairy bars—retail
 5143 Dairy depots—wholesale
 5083 Dairy farm machinery and equipment—wholesale
 0241 Dairy farms
 0241 Dairy heifer replacement farms
 0751 Dairy herd improvement associations

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STANDARD INDUSTRIAL CLASSIFICATION

- 5084 Dairy products manufacturing machinery—wholesale
 5451 Dairy products stores—retail
 5143 Dairy products—wholesale
 5149 Dairy products, dried or canned—wholesale
 5963 Dairy products, house-to-house—retail
 1629 Dam construction—general contractors
 1799 Dampproofing buildings—contractors
 7929 Dance bands
 7911 Dance hall operation
 7911 Dance instructors
 7911 Dance studios and schools
 7911 Dancing schools, professional
 5043 Darkroom apparatus—wholesale
 8243 Data processing schools
 7374 Data processing service
 7374 Data punch service
 0179 Date orchards and farms
 7299 Dating service
 7999 Day camps
 8351 Day care centers
 4953 Dead animal disposal
 5143 Dealers in dairy products—wholesale
 5144 Dealers in poultry and poultry products—wholesale
 5159 Dealers in raw farm products, except cotton, grain, and livestock—wholesale
 6221 Dealers, commodity contract
 6211 Dealers, mineral royalties or leases
 6211 Dealers, security
 4212 Debris removal, carting only
 7299 Debt counseling or adjustment service to individuals
 1721 Decorating buildings—contractors
 7699 Decorating china to individual order
 7399 Decoration service for special events
 7399 Decorators consulting service, interior—not painters or paperhangers
 0723 Decorticating flax
 4411 Deep sea foreign transportation
 5411 Delicatessen stores—retail
 7319 Delivering advertising, private
 4212 Delivery service, vehicular
 8651 Democratic clubs
 1795 Demolition of buildings or other structures (except marine)—contractors
 7399 Demonstration service, separate from sale
 8621 Dental associations
 5086 Dental equipment and supplies—wholesale
 7699 Dental instrument repair
 6324 Dental insurance (providing services by contracts with health facilities)
 8081 Dental insurance (providing services through own facilities)
 8072 Dental laboratories
 8021 Dental surgeons, offices of
 8021 Dentists, offices of
 8072 Dentures, made in dental laboratories to order for the dental profession
 **** Dentures, not made in dental laboratories—see manufacturing
 7342 Deodorant servicing of rest rooms
 5311 Department stores—retail
 6399 Deposit or share insurance
 1389 Derrick building, repairing, and dismantling: oil and gas well—contract
 5084 Derricks—wholesale
 1521 Designing and erecting (combined) single-family homes—general contractors
 1542 Designing and erecting (combined), commercial—general contractors
 1541 Designing and erecting (combined), industrial—general contractors
 1522 Designing and erecting (combined), other residential—general contractors
 8911 Designing: ship, boat, machine, and product
 7542 Detailing new autos (cleaning and polishing), contract service for dealers
 0721 Detasseling of corn
 7399 Detective agencies
 9223 Detention centers
 5161 Detergents—wholesale
 7819 Developing and printing of commercial motion picture film
 7395 Developing and printing of film, except commercial motion picture film
 7395 Developing and processing of home movies
 5043 Developing apparatus, photographic—wholesale
 7391 Development of computer and related technology (hardware)
 7372 Development of computer programs or systems (software)
 1799 Dewatering—contractors
 0171 Dewberry farms
 1429 Diabase, crushed and broken—quarrying
 1411 Diabase, dimension—quarrying
 7549 Diagnostic centers, automotive
 1799 Diamond drilling (test borings for building construction)—contractors
 1499 Diamond mining, industrial
 5094 Diamonds (gems)—wholesale
 5085 Diamonds, industrial: natural, crude—wholesale

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- 7214 Diaper service
 1453 Diaspore mining
 1499 Diatomaceous earth mining
 1499 Diatomite mining
 8299 Diction schools
 7538 Diesel engine repair, automotive
 5084 Diesel engines and parts—wholesale
 5499 Dietetic food stores—retail
 8049 Dieticians, offices of
 1629 Dike construction—general contractors
 5812 Diners (lunch stands)
 4789 Dining car services, not performed by line-haul railroad companies
 5142 Dinners, frozen—wholesale
 1423 Diorite, crushed and broken—quarrying
 1411 Diorite, dimension—quarrying
 9721 Diplomatic service
 7331 Direct mail advertising service
 5963 Direct selling organizations (headquarters of door-to-door canvassers)
 6153 Direct working capital financing
 1381 Directional drilling of oil and gas wells: on a contract basis
 7399 Directories, telephone: distribution on a contract basis
 7819 Directors, motion picture: independent
 1794 Dirt moving, building construction—contractors
 8321 Disaster services
 1629 Discharging station construction, mine—general contractors
 5813 Discotheques
 0721 Disease control for crops, with/without fertilizing
 5113 Dishes, paper—wholesale
 5064 Dishwashers, household: electric—wholesale
 7342 Disinfecting service
 1796 Dismantling of machinery and other industrial equipment—contractors
 1389 Dismantling of oil well rigs (oil field service): on a contract basis
 4469 Dismantling ships
 1795 Dismantling steel oil tanks, except oil field work—contractors
 8081 Dispensaries, not operated by groups of licensed health practitioners
 8011 Dispensaries, operated by groups of physicians
 5962 Dispensing machine sale of products—retail
 7319 Display advertising service, except outdoor
 5078 Display cases, refrigerated—wholesale
 5081 Display equipment, except refrigerated—wholesale
 0649 Distillation of gums (except pine gum), if carried on at the gum farm
 0843 Distillation of turpentine and rosin, if carried on at the gum farm
 5063 Distribution equipment, electrical—wholesale
 1623 Distribution lines (oil and gas field) construction—general contractors
 7319 Distribution of advertising circulars and handbills
 4961 Distribution of cooled air
 4911 Distribution of electric power
 4925 Distribution of manufactured gas
 4925 Distribution of mixed natural and manufactured gas
 4924 Distribution of natural gas
 6211 Distributors, security
 9222 District attorneys' offices
 9211 District courts
 7399 Divers, commercial
 1629 Dock construction—general contractors
 4454 Docking of ocean vessels
 4463 Docks, including buildings and facilities: operation and maintenance
 0279 Dog farms
 0752 Dog grooming
 7393 Dogs, rental of: for protective service
 1422 Dolomite, crushed and broken—quarrying
 1411 Dolomite, dimension—quarrying
 1429 Dolomitic marble, crushed and broken—quarrying
 1411 Dolomitic marble, dimension—quarrying
 4712 Domestic forwarding
 8811 Domestic service (private households employing cooks, maids, etc.)
 4421 Domestic transportation, deep sea
 8059 Domiciliary care with health care
 0272 Donkey farms
 1751 Door and window (prefabricated) installation—contractors
 5031 Door frames, sheet metal—wholesale
 1751 Doors, folding: installation—contractors
 1751 Doors, garage: installation or erection—contractors
 7021 Dormitories, commercially operated
 1522 Dormitory construction: general contractors
 7397 Dosimetry, radiation—commercial
 5462 Doughnut shop—retail
 1761 Downspout installation, metal—contractors
 7699 Drafting instrument repair

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- 5086 Drafting instruments—wholesale
 7362 Drafting service (temporary employees)
 7399 Drafting service, except temporary help
 7948 Dragstrip operation
 1629 Drainage project construction—general contractors
 1711 Drainage system installation (cesspool and septic tank)—contractors
 1213 Draining or pumping bituminous coal and lignite mines: on a contract basis
 1112 Draining or pumping of anthracite mines: on a contract basis
 1081 Draining or pumping of metal mines: on a contract basis
 1481 Draining or pumping of nonmetallic mineral (except fuels) mines: contract
 8299 Dramatic schools
 5023 Draperies—wholesale
 7216 Drapery dry cleaning plants
 5183 Drapery material, woven—wholesale
 5714 Drapery stores—retail
 7399 Drawback service, customs
 4212 Drying, local: without storage
 0919 Dredging oyster shells
 1629 Dredging—general contractors
 1111 Dredging, anthracite
 5621 Dress shops—retail
 7299 Dress suit rental
 5137 Dressed furs—wholesale
 5137 Dresses—wholesale
 5699 Dressmakers shops, custom—retail
 7299 Dressmaking service on material owned by individual customers
 5087 Driers, beauty shop—wholesale
 5064 Driers, clothes: electric or gas—wholesale
 5084 Drilling bits—wholesale
 1112 Drilling for anthracite mining: on a contract basis
 1213 Drilling for bituminous coal and lignite mining: on a contract basis
 1081 Drilling for metal mining: on a contract basis
 1481 Drilling for nonmetallic minerals except fuels: on a contract basis
 5161 Drilling mud—wholesale
 1381 Drilling oil and gas wells: on a contract basis
 1381 Drilling water intake wells: on a contract basis
 1781 Drilling water wells—contractors
 1381 Drilling, service well: on a contract basis
 5813 Drinking places
 5078 Drinking water coolers, mechanical—wholesale
 7333 Drive-in motion picture theaters
 7399 Drive-a-way automobile service
 5812 Drive-in restaurants
 1629 Driving piling—general contractors
 5122 Drug proprietaries—wholesale
 5912 Drug stores
 5122 Druggists' sundries—wholesale
 5122 Drugs—wholesale
 5085 Drums, new and reconditioned—wholesale
 1541 Dry cleaning plant construction: general contractors
 5087 Dry cleaning plant equipment and supplies—wholesale
 7216 Dry cleaning plants, except rug cleaning
 7215 Dry cleaning, coin-operated
 1743 Dry wall construction—contractors
 1711 Dry well (cesspool) construction—contractors
 0723 Drying of corn, rice, hay, fruits, and vegetables
 0259 Duck farms
 7933 Duck pin alleys
 7032 Dude ranches, except hotel
 1796 Dumbwaiter installation—contractors
 1459 Dumortierite mining
 4953 Dumps, operation of
 5599 Dunebuggies—retail
 5088 Dunnage (marine supplies)—wholesale
 5081 Duplicating machines—wholesale
 7339 Duplicating services: except printing, blueprinting, and photocopying
 1796 Dust collecting equipment installation—contractors
 5075 Dust collecting equipment—wholesale
 0721 Dusting crops, with/without fertilizing
 6514 Dwellings (4 or fewer) housing units: operators of
 7216 Dyeing and cleaning plants, except rug cleaning
 5161 Dyestuffs—wholesale

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- 1794 Earthmoving, building construction—contractors
 1629 Earthmoving, not connected with building construction—general contractors
 0279 Earthworm hatcheries
 9611 Economic development agencies
 7392 Economic research
 7819 Editing of motion picture film

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- 9411 Education offices, nonoperating
 7813 Educational motion picture production, except for TV
 7814 Educational motion picture production, television
 8922 Educational research agencies, noncommercial
 6732 Educational trusts, management of
 7392 Efficiency experts
 0252 Egg (chicken) farms and ranches
 5499 Egg and poultry dealers—retail
 0254 Egg hatcheries (poultry)
 5144 Eggs—wholesale
 5144 Eggs: cleaning, oil treating, packing, and grading—wholesale
 4931 Electric and other services combined (electric less than 95 percent of total)
 7629 Electric appliance repair
 5064 Electric appliances, household—wholesale
 5722 Electric household appliance stores—retail
 5064 Electric irons—wholesale
 1629 Electric light and power plant construction—general contractors
 7694 Electric motor repair
 4911 Electric power generation, transmission, or distribution
 1623 Electric power line construction—general contractors
 4011 Electric railroads
 5064 Electric ranges—wholesale
 7629 Electric razor repair
 5999 Electric razor shops—retail
 5064 Electric razors—wholesale
 7629 Electric tool repair
 5064 Electric washing machines—wholesale
 5013 Electrical automobile engine testing equipment—wholesale
 5063 Electrical construction materials—wholesale
 5063 Electrical generators—wholesale
 7629 Electrical measuring instrument repair and calibration
 7629 Electrical repair shops, except radio, television, and refrigerator repair
 7539 Electrical service, automotive (battery and ignition repair)
 1731 Electrical work—contractors
 7394 Electronic equipment rental and service, except computers
 7629 Electronic equipment repair, except computer and related equipment
 5065 Electronic parts—wholesale
 5065 Electronic tubes: receiving and transmitting, and industrial—wholesale
 8211 Elementary schools
 1622 Elevated highway construction—general contractors
 4111 Elevated railway operation
 1791 Elevator front installation, metal—contractors
 1796 Elevator installation and conversion—contractors
 4221 Elevators, grain: except sales
 1796 Elevators, home-installation—contractors
 5064 Elevators, including repair—wholesale
 7399 Embroidering of advertising on shirts, etc.
 1499 Emery mining
 0119 Emmer farms
 8631 Employees' associations, for improvement of wages and working conditions
 7361 Employment agencies, except theatrical and motion picture
 7819 Employment agencies, motion picture
 7922 Employment agencies: theatrical, radio, and television
 1446 Enamel sand mining
 5198 Enamels—wholesale
 5719 Enamelware stores—retail
 5963 Encyclopedias, house-to-house selling
 7536 Engine repair, automotive
 7699 Engine repair, except automotive
 5013 Engine testing equipment, automobile: electrical—wholesale
 8621 Engineering associations
 7362 Engineering job shops (temporary employees)
 7391 Engineering laboratories, except testing (not manufacturing auxiliaries)
 8911 Engineering: industrial, civil, electrical, mechanical, design, etc.
 5066 Engineers' equipment and supplies—wholesale
 5064 Engines and parts, diesel—wholesale
 5066 Engines, dental—wholesale
 0161 English pea farms
 7399 Engrossing of diplomas, resolutions, etc.
 7929 Entertainers
 7929 Entertainment groups
 7929 Entertainment service: entertainers for restaurants, clubs, radio, and TV
 0721 Entomological service
 8999 Entomologists, consulting: not with business service laboratories
 9431 Environmental health programs
 9511 Environmental protection agencies

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- 9511** Environmental quality and control agencies

1799 Epoxy application—contractors

9441 Equal employment opportunities offices

7394 Equipment rental and leasing

1389 Erecting lease tanks, oil fields: on a contract basis

1799 Erection and dismantling of forms for poured concrete—contractors

7299 Escort service

6531 Escrow agents, real estate

6059 Escrows, other than real estate

5161 Essential oils—wholesale

6056 Establishments of corporations for banking abroad

6611 Estate planning, real estate and insurance

8811 Estates, private

0851 Estimating timber

1321 Ethane (natural) production

5082 Excavating machinery and equipment—wholesale

1389 Excavating slush pits and cellars: on a contract basis

1794 Excavation work—contractors

6281 Exchange clearing houses, commodity

6281 Exchange clearing houses, security

6231 Exchanges, commodity

6231 Exchanges, security

4459 Excursion boat operation

9111 Executive advisory commissions

7361 Executive placing services

5941 Exercise apparatus—retail

7539 Exhaust system service (muffler shops)

7999 Exhibition operation

7399 Exhibits (building of), industrial contractors

1081 Exploration, metal mining: on a contract basis

1481 Exploration, nonmetallic minerals except fuels: on a contract basis

1382 Exploration, oil and gas field: on a contract basis

5161 Explosives, all kinds except ammunition and fireworks—wholesale

6159 Export-Import Bank

7999 Exposition operation

4041 Express service, railway

8051 Extended care facilities

7342 Exterminating service

8069 Eye, ear, nose, and throat hospitals

5949 Fabric shops—retail

6725 Face-amount certificate issuing

7374 Facilities management, computer

7369 Facilities management, except computers

6153 Factors of commercial paper

1541 Factory construction: general contractors

7999 Fairs, agricultural: operation of

5211 Fallout shelters—retail

8321 Family (marriage) counseling services

5651 Family clothing stores—retail

9211 Family courts

8321 Family location services

8081 Family planning clinics

8321 Family service agencies

5084 Fans, industrial—wholesale

1542 Farm building construction, except residential—general contractors

8699 Farm bureaus

8699 Farm granges

8811 Farm homes, noncommercial

0761 Farm labor contractors

5083 Farm machinery and equipment—wholesale

7699 Farm machinery repair

0762 Farm management services

6131 Farm mortgage companies

4221 Farm product warehousing and storage, other than cold storage

5191 Farm supplies—wholesale

4212 Farm to market hauling

6131 Farmers Home Administration

******** Farms—see type of farm

8811 Farms, residential: noncommercial

7362 Fashion show service (supply of models only)

5812 Fast food stores (prepared food)

5159 Feathers—wholesale

9621 Federal Aviation Administration, including control tower operation

9221 Federal Bureau of Investigation

9631 Federal Communications Commission

6331 Federal Crop Insurance Corporation

6142 Federal credit unions

6113 Federal Farm Mortgage Corporation

6112 Federal home loan banks

6113 Federal intermediate credit banks (agricultural credit)

6131 Federal land banks

6011 Federal Reserve banks

9311 Federal Reserve Board

6011 Federal Reserve branches

6122 Federal savings and loan associations

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- 0119 Feed grain farms
 5191 Feed, except unmixed grain—wholesale
 0211 Feedlots, cattle
 0213 Feedlots, hog
 0214 Feedlots, lamb
 1459 Feldspar mining
 5199 Felt—wholesale
 5039 Felts, tarred—wholesale
 5039 Fence and accessories, wire—wholesale
 1799 Fence construction—contractors
 5211 Fencing dealers—retail
 1061 Ferberite mining
 4453 Ferries operating across rivers or within harbors
 4431 Ferries operating on the Great Lakes and St. Lawrence Seaway
 5051 Ferroalloys—wholesale
 5191 Fertilizer and fertilizer materials—wholesale
 0711 Fertilizer application
 5261 Fertilizer—retail
 5039 Fiberglass building materials—wholesale
 5159 Fibers, vegetable—wholesale
 6351 Fidelity insurance
 6531 Fiduciaries, real estate
 6059 Fiduciary agencies, other than real estate or trust
 0139 Field crop farms, except cotton, tobacco, potato, sugar, and cash grain
 0181 Field nurseries: growing of flowers and shrubbery, except forest shrubbery
 7399 Field warehousing (not public warehousing)
 0179 Flg orchards and farms
 0723 Filbert hulling and shelling
 1499 Fill dirt pits
 7399 Filling pressure containers (aerosol) with hair spray, insecticides, etc.
 5541 Filling stations, gasoline—retail
 7397 Film badge service (radiation detection)
 7829 Film delivery, motion picture
 7823 Film exchanges, motion picture
 7824 Film exchanges, motion picture: for television
 7829 Film libraries, motion picture
 7819 Film libraries, stock footage
 7395 Film processing, except for the motion picture industry
 7819 Film processing, motion picture
 7829 Film purchasing agencies, motion picture
 7333 Film strips and slides
 1446 Filtration sand mining
 6145 Finance companies, personal: small loan—licensed
 6159 Finance leasing of automobiles, trucks, and machinery
 6281 Financial advice and service, investment
 7392 Financial management service to business
 6281 Financial reporting
 6351 Financial responsibility insurance
 6146 Financing of automobiles, airplanes, furniture, appliances, etc.
 6153 Financing of dealers by motor vehicle manufacturers' organizations
 5087 Findings, shoe repair—wholesale
 0912 Finfish, catching of
 7393 Fingerprint service
 8299 Finishing schools (charm and modeling)
 8211 Finishing schools (secondary)
 1731 Fire alarm installation—contractors
 7393 Fire alarm maintenance and monitoring
 1453 Fire clay mining
 7699 Fire control (military) equipment repair
 9224 Fire departments, including volunteer
 1799 Fire escape installation—contractors
 5099 Fire extinguishers—wholesale
 7399 Fire extinguishers, service of
 0851 Firefighting (forest)
 5087 Firefighting equipment—wholesale
 6331 Fire insurance and reinsurance
 6411 Fire Insurance Underwriters' Laboratories
 6411 Fire loss appraisal
 9224 Fire marshals' offices
 9224 Fire prevention offices—government
 0851 Fire prevention, forestry
 7399 Fire protection service, other than forestry or public
 1542 Fire station construction: general contractors
 5941 Firearms—retail
 5041 Firearms—wholesale
 5719 Fireplace screens and accessories—retail
 1752 Fireproof flooring construction—contractors
 1799 Fireproofing buildings—contractors
 7999 Fireworks display service
 5999 Fireworks—retail
 5042 Fireworks—wholesale
 7699 Firing china to individual order
 9512 Fish and wildlife conservation
 0279 Fish farms
 0921 Fish hatcheries
 5423 Fish markets—retail

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| 5146 | Fish, cured—wholesale | 4582 | Flying fields, except those maintained by aviation clubs |
| 5146 | Fish, fresh—wholesale | 7997 | Flying fields, maintained by aviation clubs |
| 5146 | Fish, frozen, except packaged—wholesale | 8299 | Flying instruction |
| 5142 | Fish, frozen: packaged—wholesale | 5199 | Foam rubber—wholesale |
| 0912 | Fisheries, finfish | 7399 | Folding and refolding service: textiles, shirts, etc. |
| 0913 | Fisheries, shellfish | 1751 | Folding door installation—contractors |
| 5941 | Fishermen's equipment—retail | 5422 | Food and freezer plans, meat—retail |
| 7999 | Fishing boats, party: operation of | 5141 | Food brokers, general line—wholesale |
| 7032 | Fishing camps | 9641 | Food inspection agencies |
| 1389 | "Fishing" for tools, oil and gas field: on a contract basis | 4222 | Food lockers, rental |
| 7999 | Fishing lakes, operation of | 5411 | Food markets—retail |
| 0921 | Fishing preserves | 5084 | Food product manufacturing machinery—wholesale |
| 5074 | Fittings, plumbers'—wholesale | 1541 | Food products manufacturing or packing plant: general contractors |
| 5999 | Flag shops—retail | 7391 | Food research (not manufacturing auxiliaries) |
| 1411 | Flagstone mining | 5963 | Food service, mobile—retail |
| 7218 | Flame resistant clothing supply service | 7397 | Food testing service |
| 0723 | Flax decorticating and retting | 5081 | Food warming equipment, commercial—wholesale |
| 0139 | Flax farms, except for flaxseed | 7941 | Football clubs |
| 0119 | Flaxseed farms | 5661 | Footwear—retail |
| 1453 | Flint clay mining | 5139 | Footwear, all kinds—wholesale |
| 7399 | Floats, decoration of | **** | Force account construction—code according to the use for which constructed |
| 1629 | Flood control project construction—general contractors | 6052 | Foreign bank agencies, not in general accepting U.S. deposits |
| 5713 | Floor covering stores—retail | 6052 | Foreign currency exchanges (purchasing and selling) |
| 5023 | Floor coverings—wholesale | 4712 | Foreign forwarding |
| 1752 | Floor laying, scraping, finishing, and re-finishing—contractors | 4411 | Foreign transportation, deep sea |
| 1771 | Floor surfacing, concrete—contractors | 0851 | Forest management plans, preparation of |
| 5713 | Floor tile stores—retail | 0821 | Forest nurseries |
| 6221 | Floor traders, commodity contract | 6519 | Forest properties, lessors of |
| 6211 | Floor traders, security | 0851 | Forestry services |
| 7349 | Floor waxing service | 5051 | Forgings, ferrous—wholesale |
| 5211 | Flooring, wood—retail | 1799 | Forms for poured concrete erection and dismantling of—contractors |
| 7399 | Florist telegraph service | 5051 | Forms, concrete construction (steel)—wholesale |
| 5199 | Florists—wholesale | 7999 | Fortune tellers |
| 5992 | Florists—retail | 4712 | Forwarding, domestic |
| 0181 | Florists' greens, cultivated: growing of | 4712 | Forwarding, foreign |
| 6211 | Flotation companies, security | 5631 | Foundation garments—retail |
| 0723 | Flour mills, custom | 1794 | Foundation work (excavation)—contractors |
| 5149 | Flour—wholesale | 5051 | Foundry products—wholesale |
| 5261 | Flower bulbs—retail | 1446 | Foundry sand |
| 5191 | Flower and field bulbs—wholesale | 5145 | Fountain fruits and sirups—wholesale |
| 5999 | Flowers, artificial—retail | | |
| 5199 | Flowers, artificial—wholesale | | |
| 5992 | Flowers, fresh—retail | | |
| 5199 | Flowers, fresh—wholesale | | |
| 0181 | Flowers, growing of | | |
| 5039 | Flue linings—wholesale | | |
| 1473 | Fluorite mining | | |
| 1473 | Fluorspar mining | | |
| 1473 | Fluorspar, ground or otherwise treated | | |
| 4521 | Flying charter service | | |

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- 7699 Fountain pen repair shops
 5112 Fountain pens—wholesale
 0271 Fox farms
 1321 Fractionating natural gas liquids
 7539 Frame repair shops, automotive
 6794 Franchises, selling or licensing
 5812 Frankfurter (hot dog) stands
 6321 Fraternal accident and health insurance organizations
 8641 Fraternal associations, other than insurance offices
 6311 Fraternal life insurance organizations
 6311 Fraternal protective associations
 8641 Fraternities and sororities, except residential
 7041 Fraternity residential houses
 5422 Freezer food plans, meat—retail
 5422 Freezer provisioners, meat—retail
 5722 Freezers, household—retail
 5064 Freezers, household—wholesale
 4723 Freight agencies, railroad: not operated by railroad companies
 4789 Freight car loading and unloading (not truckers)
 4712 Freight consolidation
 4712 Freight forwarding
 4783 Freight packing and crating
 4723 Freight rate information service
 4231 Freight trucking terminals, with or without maintenance facilities
 7219 French hand laundries
 1743 Fresco work—contractors
 0279 Frog farms
 7539 Front end repair, automotive
 5812 Frozen custard stands
 5143 Frozen dairy products—wholesale
 5411 Frozen food and freezer plans, except meat—retail
 4222 Frozen food locker rental
 5422 Frozen food plans, meat—retail
 5142 Frozen foods, packaged—wholesale
 5142 Frozen vegetables—wholesale
 5431 Fruit and vegetable stands—retail
 0723 Fruit drying
 5961 Fruit in fancy baskets, mail order—retail
 5142 Fruit juices, frozen—wholesale
 5149 Fruit peel—wholesale
 4742 Fruit precooling, in connection with railroad transportation
 0723 Fruit precooling, not in connection with transportation
 0723 Fruit sorting, grading, and packing
 0181 Fruit stocks, growing of
 5431 Fruit stores—retail
 0722 Fruits and vegetables, machine harvesting of
 0182 Fruits grown under cover
 5149 Fruits, dried—wholesale
 5145 Fruits, fountain—wholesale
 5431 Fruits, fresh—retail
 5148 Fruits, fresh—wholesale
 5142 Fruits, frozen—wholesale
 0251 Frying chickens, raising of
 5982 Fuel and ice dealers; except fuel oil and bottled gas—retail
 5984 Fuel dealers, bottled liquefied petroleum gas—retail
 1711 Fuel oil burner installation and servicing—contractors
 5983 Fuel oil dealers—retail
 5172 Fuel oil, except bulk stations and terminals—wholesale
 7539 Fuel system repair, motor vehicle
 5982 Fuel wood, forest cut—retail
 5062 Fuel: coal and coke—wholesale
 5172 Fueling services, aircraft—wholesale
 1454 Fuller's earth mining
 7342 Fumigating service
 8399 Fund raising organizations, except on a fee basis (United Funds, etc.)
 7399 Fund raising organizations, on a fee basis
 7261 Funeral directors
 7261 Funeral homes or parlors
 6311 Funeral insurance
 5681 Fur apparel made to custom order—retail
 7219 Fur cleaning
 5137 Fur clothing—wholesale
 5093 Fur cuttings and scraps—wholesale
 0271 Fur farms
 7219 Fur garments: cleaning, repairing, and storage
 5681 Fur shops—retail
 4226 Fur storage, for the trade
 7699 Furnace and chimney cleaning
 7699 Furnace cleaning service
 1629 Furnace construction for industrial plants—general contractors
 1711 Furnace repair—contractors
 5074 Furnaces, except electric and warm air—wholesale
 5075 Furnaces, warm air—wholesale
 7021 Furnished rooms, rental of
 5611 Furnishing stores, men's and boys'—retail
 5136 Furnishings, except shoes: men's and boys'—wholesale

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5137 Furnishings, except shoes: women's, children's and infants'—wholesale
 7217 Furniture cleaning on customers' premises
 5712 Furniture made on a custom basis to individual order—retail
 4214 Furniture moving, local: combined with storage
 4212 Furniture moving, local: without storage
 7641 Furniture refinishing
 7394 Furniture rental
 7641 Furniture repairing, cleaning, redecorating and remodeling shops
 7641 Furniture restoration, antique
 4224 Furniture storage, without local trucking
 5712 Furniture stores, household—retail
 5931 Furniture stores, secondhand—retail
 5931 Furniture, antique—retail
 5712 Furniture, custom made—retail
 5712 Furniture, household, with or without furnishings and appliances—retail
 5021 Furniture, juvenile—wholesale
 5021 Furniture: household, office, restaurant, public building—wholesale
 5681 Furriers—retail
 5137 Furs, dressed—wholesale
 5159 Furs, raw—wholesale
 5063 Fuses and accessories—wholesale
 6221 Futures, commodity brokers and dealers

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1429 Gabbro, crushed and broken—quarrying
 1411 Gabbro, dimension—quarrying
 1031 Galena mining
 7999 Gambling establishments, not primarily operating coin-operated machines
 7993 Gambling establishments, primarily operating coin-operated machines
 7993 Gambling machines, coin-operated: operation of
 7999 Gambling machines, except coin-operated: operation of
 9512 Game and inland fish agencies
 0271 Game farms (fur-bearing animals)
 5099 Game machines, coin-operated—wholesale
 0971 Game management
 7999 Game parlors (not coin-operated)
 0971 Game preserves
 0971 Game propagation
 0971 Game retreats, operation of
 5945 Game shops—retail

5042 Games—wholesale
 7999 Games, teaching of
 1429 Gabbro, crushed and broken—quarrying
 1542 Garage construction: general contractors
 1751 Garage door installation or erection—contractors
 5211 Garage doors, sale and installation—retail
 7525 Garages, automobile parking
 7538 Garages, general automotive repair and service
 4212 Garbage and refuse, collecting and transporting: without disposal
 5722 Garbage disposers, electric—retail
 5064 Garbage disposers, electric—wholesale
 4953 Garbage: collecting, destroying, and processing
 5083 Garden machinery and equipment—wholesale
 0782 Garden maintenance
 0781 Garden planning
 0782 Garden planting
 5261 Garden supplies and tools—retail
 7219 Garment alteration and repair shops
 7212 Garment pressing shop
 1499 Garnet mining
 1623 Gas (natural) compressing station construction—general contractors
 1311 Gas (natural) production
 5541 Gas and oil—retail
 4932 Gas and other services combined (gas less than 95 percent of total)
 7699 Gas appliance repair service
 1389 Gas compressing (natural gas) at the fields: on a contract basis
 1382 Gas exploration: on a contract basis
 5722 Gas household appliance stores—retail
 1799 Gas leakage detection—contractors
 5099 Gas lighting fixtures—wholesale
 1623 Gas main construction—general contractors
 7399 Gas systems, contract conversion from manufactured to natural gas
 1381 Gas well drilling: on a contract basis
 1389 Gas well rig building, repairing, and dismantling: on a contract basis
 5984 Gas, liquefied petroleum: bottled—retail
 4925 Gas, liquefied petroleum: distribution through mains
 4925 Gas, manufactured: production and distribution
 4925 Gas, mixed natural and manufactured: production and distribution
 4924 Gas, natural: distribution

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- 4922 Gas, natural: transmission
 4923 Gas, natural: transmission and distribution
 5161 Gases, compressed and liquefied: except liquefied petroleum gas—wholesale
 5172 Gases, liquefied petroleum: except bulk stations and terminals—wholesale
 5085 Gaskets—wholesale
 1821 Gasoline (natural) production
 5541 Gasoline filling stations—retail
 4613 Gasoline pipe lines (common carriers)
 1799 Gasoline pump installation—contractors
 5172 Gasoline, except bulk stations and terminals—wholesale
 5172 Gasoline: buying in bulk and selling to farmers—wholesale
 5039 Gates and accessories, wire—wholesale
 0849 Gathering of gums (except pine gum) and barks
 0821 Gathering, extracting, and selling of tree seeds
 0259 Geese farms
 1499 Gem stones (natural) mining
 5094 Gem stones—wholesale
 5099 Gem stones, rough—retail
 7299 Genealogical investigation service
 9199 General accounting offices—government
 6159 General and industrial loan institutions
 9211 General courts
 0729 General crop services
 8062 General medical and surgical hospitals
 5399 General merchandise stores—retail
 9199 General services departments—government
 5399 General stores—retail
 4225 General warehousing and storage
 4911 Generation of electric power
 7539 Generator and starter repair, automotive
 5063 Generators, electrical—wholesale
 1382 Geological exploration, oil and gas field: on a contract basis
 8999 Geologists, consulting: not connected with business service laboratories
 1382 Geophysical exploration, oil and gas field: on a contract basis
 8069 Geriatric hospitals
 8999 Ghost writing
 5947 Gift shops—retail
 5199 Gifts and novelties—wholesale
 1499 Gilsonite mining
 0723 Ginning moss
 0724 Ginning, cotton
 0849 Ginseng, gathering of
 8641 Girl Scout organizations
 7032 Girls' camps
 5085 Glass bottles—wholesale
 1793 Glass installation—contractors
 7539 Glass replacement and repair, automotive
 1446 Glass sand mining
 5231 Glass stores—retail
 1793 Glass work—contractors
 5089 Glass, flat—wholesale
 5122 Glass, medical—wholesale
 5719 Glassware stores—retail
 5023 Glassware—wholesale
 5931 Glassware, antique—retail
 1474 Glauber's salt mining
 7099 Glazing and cleaning baking pans
 1799 Glazing of concrete surfaces—contractors
 1793 Glazing work—contractors
 7219 Glove mending for individuals
 5431 Glove stores—retail
 5136 Gloves (all materials) men's and boys'—wholesale
 5137 Gloves (all materials) women's, children's, and infants'—wholesale
 1423 Gneiss, crushed and broken—quarrying
 1411 Gneiss, dimension—quarrying
 0214 Goat farms
 5154 Goats—wholesale
 0214 Goat's milk production
 7999 Gocart raceway operation
 7999 Gocart rentals
 5599 Gocarts—retail
 5041 Gocarts—wholesale
 1041 Gold lode mining
 1041 Gold placer mining
 0279 Goldfish farms
 7997 Golf clubs, membership
 7992 Golf clubs, nonmembership
 1611 Golf course construction—general contractors
 7999 Golf courses, miniature: operation of
 7992 Golf courses, public: operation of
 7999 Golf driving ranges
 5941 Golf goods and equipment—retail
 7999 Golf professionals, not operating retail stores
 5941 Golf professionals, operating retail stores
 7999 Golf, pitch-n-putt
 9111 Governors' offices
 1622 Grade crossing elimination (overpass or underpass)—general contractors
 5082 Graders, motor—wholesale
 1611 Grading for highways and airports—general contractors
 1389 Grading oil and gas well foundations: on a contract basis

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1499 Grahamite mining
 0723 Grain cleaning
 1541 Grain elevator construction—general contractors
 5153 Grain elevators, except storage only
 4221 Grain elevators, storage only
 0119 Grain farms: except wheat, rice, corn, and soybeans
 0723 Grain grinding, custom
 4742 Grain leveling in railroad cars
 4742 Grain trimming service, for railroad shipment
 5153 Grain—wholesale
 0722 Grain, machine harvesting of
 5039 Granite building stone—wholesale
 1411 Granite, dimension—quarrying
 1423 Granite, crushed and broken—quarrying
 0172 Grape farms
 0174 Grapefruit groves and farms
 7333 Graphic arts and related design
 1499 Graphite mining
 1799 Grave excavation—contractors
 1442 Gravel mining
 5039 Gravel—wholesale
 5099 Gravestones, finished—retail
 5199 Greases, animal and vegetable—wholesale
 4431 Great Lakes and St. Lawrence Seaway Transportation
 0161 Green lima bean farms
 0161 Green pea farms
 0181 Greenhouses for floral products
 0182 Greenhouses for food crops
 1499 Greensand mining
 1411 Greenstone, dimension—quarrying
 5947 Greeting card shops—retail
 5112 Greeting cards—wholesale
 8999 Greeting cards, hand painting of
 5812 Grills (eating places)
 1499 Grinding peat
 1446 Grinding sand mining
 1499 Grindstone quarrying
 0723 Grist mills, custom
 1429 Grits mining (crushed stone)
 5141 Groceries, general line—wholesale
 5411 Grocery stores, with or without fresh meat—retail
 5085 Grommets—wholesale
 8351 Group day care centers
 8361 Group foster homes
 8081 Group health associations, providing medical services (not insurance) only
 6324 Group hospitalisation plans
 1771 Grouting—contractors

**** Groves—see type of grove
 8611 Growers' associations, not engaged in contract buying or selling
 8611 Growers' marketing advisory services
 1479 Guano mining
 6361 Guaranty of titles
 1611 Guard rail construction on highways—general contractors
 7999 Guides, hunting
 7999 Guides, tourist
 0849 Gums (except pine gum), gathering of
 7997 Gun clubs, membership
 7699 Gun parts, made to individual order
 1771 Gunite contractors
 7699 Gunsmith shops
 1761 Gutter installation, metal—contractors
 5941 Gymnasium equipment—retail
 7999 Gymnasiums, operation of: nonmembership
 8011 Gynecologists, offices of
 1492 Gypsite mining
 1492 Gypsum mining

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5611 Haberdashery stores—retail
 0912 Haddock, catching of
 5184 Hair accessories—wholesale
 7241 Hair stylists, men's
 5159 Hair, animal—wholesale
 7231 Hairdressers
 8361 Halfway group homes for persons with social or personal problems
 8361 Halfway homes for delinquents and offenders
 7219 Hand laundries
 5072 Hand saws—wholesale
 5251 Hand tools—retail
 5631 Handbag stores—retail
 5137 Handbags—wholesale
 7319 Handbill distribution service
 7399 Handwriting analysis
 4582 Hangar operation
 5063 Hanging and fastening devices, electrical—wholesale
 1629 Harbor construction—general contractors
 1211 Hard coal mining, except Pennsylvania anthracite
 5251 Hardware stores—retail
 5013 Hardware, automotive—wholesale
 5072 Hardware, builders'—wholesale
 5072 Hardware, heavy—wholesale
 5063 Hardware, pole line—wholesale

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- 5072 Hardware, shelf or light—wholesale
 1752 Hardwood flooring—contractors
 5191 Harness equipment—wholesale
 5191 Harness made to individual order—wholesale
 7699 Harness repair shops
 5083 Harvesting machinery and equipment—wholesale
 5136 Hat and cap material—wholesale
 7251 Hat cleaning and blocking shops
 5611 Hat stores, men's and boys'—retail
 0921 Hatcheries, fish
 0254 Hatcheries, poultry
 5136 Hats, men's and boys'—wholesale
 5137 Hats: women's, children's, and infants'—wholesale
 4212 Hauling live poultry: on a contract or fee basis
 4212 Hauling, by dump truck
 4212 Hauling, farm to market
 0723 Hay baling
 0723 Hay cubing
 0723 Hay drying
 0139 Hay farms
 0722 Hay mowing, raking, baling, and chopping
 5191 Hay—wholesale
 5083 Haying machinery—wholesale
 8351 Head Start centers, except in conjunction with schools
 6321 Health and accident insurance
 8399 Health and welfare councils
 7299 Health clubs or spas
 5499 Health food stores—retail
 6411 Health insurance coverage consulting service
 8081 Health maintenance organizations (HMO)
 9431 Health statistics centers
 5999 Hearing aids—retail
 5065 Hearing aids—wholesale
 4119 Hearse and limousine rental: with drivers
 7512 Hearses and limousines, rental without drivers
 5084 Heat exchange equipment, industrial—wholesale
 1711 Heating equipment installation, except electric—contractors
 1731 Heating equipment installation, electric—contractors
 4742 Heating of railroad cars
 4961 Heating systems, steam (suppliers of heat)
 1711 Heating, except electric, with or without sheet metal work—contractors
 5087 Heels, shoe—wholesale
 4511 Helicopter carriers, certificated
 8321 Helping hand services: Big Brother, Big Sister, etc.
 1011 Hematite mining
 0849 Hemlock gum, gathering of
 7694 Hermetics repair
 5159 Hides (may include curing)—wholesale
 5732 High fidelity (hi-fi) equipment—retail
 5064 High fidelity (hi-fi) equipment—wholesale
 8211 High schools, junior and senior
 1622 Highway (elevated) construction—general contractors
 4784 Highway bridges, operation of
 1611 Highway construction, except elevated highways—general contractors
 1611 Highway signs, installation of—general contractors
 8699 Historical clubs, other than professional
 5945 Hobby shops—retail
 0721 Hoeing
 0213 Hog farms
 5154 Hogs—wholesale
 5084 Hoists—wholesale
 6711 Holding companies
 5931 Home furnishing stores, secondhand—retail
 5023 Home furnishings—wholesale
 5931 Home furnishings, antique—retail
 **** Home furnishings, except antique—retail—see kind of furnishing
 1522 Home improvements, other residential—general contractors
 1521 Home improvements, single-family—general contractors
 7221 Home photographers
 8321 Homemakers' services
 8361 Homes for children, with health care incidental
 8361 Homes for destitute men and women
 8059 Homes for retarded, with health care
 8361 Homes for retarded, with health care incidental
 8361 Homes for the aged, with health care incidental
 8361 Homes for the deaf or blind, with health care incidental
 8361 Homes for the emotionally disturbed, with health care incidental

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- 8861 Homes for the physically handicapped, with health care incidental
 0279 Honey production
 0752 Honey straining (on the farm)
 5149 Honey—wholesale
 9223 Honor camps
 5199 Hop extract—wholesale
 0139 Hop farms
 5159 Hops—wholesale
 0272 Horse farms
 7999 Horse shows
 5159 Horses—wholesale
 0759 Horses, boarding or training (including race horses)
 7948 Horses, breeding and racing
 7948 Horses, race: owners of
 7699 Horsehoeing
 0781 Horticultural advisory or counseling services
 5085 Hose, belting, and packing: industrial—wholesale
 7399 Hosiery pairing, on a contract or fee basis
 7219 Hosiery repair service
 5631 Hosiery stores—retail
 5137 Hosiery, women's, children's, and infants'—wholesale
 6324 Hospital and medical service plans
 1542 Hospital construction: general contractors
 5086 Hospital equipment and supplies, including beds—wholesale
 7349 Hospital housekeeping (cleaning service), on a contract basis
 6321 Hospitalization insurance
 8062 Hospitals, general medical and surgical
 8063 Hospitals, mental
 8063 Hospitals, psychiatric
 8069 Hospitals, specialty except psychiatric
 5812 Hot dog (frankfurter) stands
 1522 Hotel construction: general contractors
 5081 Hotel equipment (except furniture) and supplies—wholesale
 7399 Hotel reservation service
 7011 Hotels
 7011 Hotels, except residential
 7041 Hotels, organization
 6513 Hotels, residential: operators
 7011 Hotels, seasonal
 1521 House construction, single-family—general contractors
 5963 House delivery of purchased milk—retail
 1799 House moving—contractors
 1721 House painting—contractors
 7519 House trailer rental
 5963 House-to-house distribution of coffee, soda, beer, and bottled water, etc.
 1521 House: shell erection, single-family—general contractors
 7999 Houseboat rentals
 5722 Household appliance stores, electric or gas—retail
 5712 Household furniture—retail
 5021 Household furniture—wholesale
 4214 Household goods moving, local: combined with storage
 4224 Household goods, warehousing and storage: without local trucking
 8811 Households, private: employing cooks, maids, chauffeurs, gardeners, etc.
 9223 Houses of correction
 5719 Housewares stores—retail
 5963 Housewares: house-to-house, telephone or party-plan selling
 9531 Housing agencies
 9531 Housing authorities—nonoperating
 0849 Huckleberry greens, gathering of
 5963 Hucksters—retail
 1061 Huebnerite mining
 0723 Hulling and shelling of tree nuts
 7399 Human skeleton preparation, on material owned by others
 8699 Humane societies, animal
 7997 Hunt clubs, membership
 5941 Hunter's equipment—retail
 7032 Hunting camps
 0971 Hunting carried on as a business enterprise
 7999 Hunting guides
 0971 Hunting preserves, operation of
 1389 Hydraulic fracturing wells: on a contract basis
 1629 Hydroelectric plant construction—general contractors
 5074 Hydronic heating equipment and supplies—wholesale
 8299 Hypnosis schools
- I
- 5451 Ice cream (packaged) stores—retail
 5143 Ice cream and ices—wholesale
 5078 Ice cream cabinets—wholesale
 5812 Ice cream stands
 5963 Ice cream wagons—retail
 5982 Ice dealers—retail
 7941 Ice hockey clubs
 5078 Ice making machines—wholesale
 7999 Ice skating rink operation
 5199 Ice, manufactured or natural—wholesale

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- 1499 Iceland spar (optical grade calcite) mining
 4742 Icing of railroad cars
 5043 Identity recorders for photographing checks and fingerprints—wholesale
 7539 Ignition service, automotive
 1099 Ilmenite mining
 9431 Immunisation program administration
 1339 Impounding and storing salt water in connection with petroleum production
 4971 Impounding reservoirs, irrigation
 1796 Incinerator installation (small)—contractors
 4953 Incinerator operation
 5034 Indicating instruments and accessories—wholesale
 6512 Industrial and commercial buildings, operators of
 6023 Industrial banks (accepting deposits), insured: not members of Federal Reserve System
 6022 Industrial banks (accepting deposits), members of Federal Reserve System
 6024 Industrial banks (accepting deposits), State: not insured
 1541 Industrial building construction—general contractors
 5161 Industrial chemicals—wholesale
 7392 Industrial development planning service, commercial
 5065 Industrial electronic tubes—wholesale
 1796 Industrial equipment installation—contractors
 5065 Industrial fittings—wholesale
 1629 Industrial incinerator construction—general contractors
 7391 Industrial laboratories, except testing (not manufacturing auxiliaries)
 7218 Industrial launderers
 6144 Industrial loan companies, not engaged in deposit banking
 7392 Industrial management service
 7813 Industrial motion picture production, except for TV
 1629 Industrial plant appurtenance construction—general contractors
 1541 Industrial plant construction—general contractors
 5161 Industrial salts—wholesale
 1446 Industrial sand mining
 5085 Industrial sewing thread—wholesale
 8611 Industrial standards committees
 7218 Industrial uniform supply service
 5085 Industrial wheels—wholesale
 7214 Infant wear service
 5641 Infants' wear stores—retail
 5137 Infants' wear—wholesale
 9211 Inferior courts
 4723 Information service, freight rate
 5051 Ingots—wholesale
 5085 Ink, printer's—wholesale
 5112 Ink, writing—wholesale
 7011 Inns, furnishing food and lodging
 0721 Insect control for crops, with/without fertilizing
 5191 Insecticides—wholesale
 9651 Inspection for labor standards and safety
 7399 Inspection of commodities, not connected with transportation
 7549 Inspection service, automotive
 4782 Inspection services connected with transportation
 1796 Installation of machinery and other industrial equipment—contractors
 6153 Installment notes, buying of
 6153 Installment paper dealer
 6146 Installment sales finance, other than banks
 1542 Institutional building construction—general contractors
 7699 Instrument repair, except electrical or clock
 7699 Instrument repair, mechanical
 1742 Insulation installation, buildings—contractors
 5211 Insulation material, building—retail
 1799 Insulation of pipes and boilers—contractors
 5039 Insulation, thermal: rigid and nonrigid—wholesale
 5063 Insulators, electrical—wholesale
 6411 Insurance adjusters
 6411 Insurance advisory services
 6411 Insurance agents
 6411 Insurance brokers
 6512 Insurance buildings, operation of
 6411 Insurance claim adjusters, not employed by insurance companies
 9651 Insurance commissions
 6411 Insurance educational services
 6411 Insurance information bureaus
 6411 Insurance inspection and investigation services
 6411 Insurance loss prevention services
 6411 Insurance patrol services
 **** Insurance policy sales through vending machines—code as insurance
 6149 Insurance premium financing
 6411 Insurance professional standards services

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|------|---|------|--|
| 6411 | Insurance rate making services | 5711 | Investment holding companies |
| 6411 | Insurance reporting services | 6281 | Investment research |
| 6411 | Insurance research services | 6724 | Investment trusts, unit |
| 6411 | Insurance services | 6724 | Investors' syndicates |
| 6321 | Insurance, accident and health | 1099 | Iridium ore mining |
| 6399 | Insurance, bank deposit or share | 0184 | Irish potato farms |
| 6351 | Insurance, credit or other financial responsibility | 1011 | Iron agglomerate and pellet production |
| 6351 | Insurance, fidelity | 5051 | Iron and steel flat products—wholesale |
| 6311 | Insurance, life | 5093 | Iron and steel scrap—wholesale |
| 6611 | Insurance, real estate, loans, law offices : combinations of | 5051 | Iron and steel semifinished products—wholesale |
| 6351 | Insurance, surety | 1011 | Iron ore dressing (beneficiation) plants |
| 6361 | Insurance, title protection | 1011 | Iron ore mining |
| 6331 | Insurance: fire, marine, and casualty | 5052 | Iron ore—wholesale |
| 4131 | Intercity bus lines | 1011 | Iron ore, blocked |
| 4131 | Intercity motor vehicle highway passenger transportation, special service | 1799 | Iron work, ornamental—contractors |
| 4423 | Intercoastal transportation | 1791 | Iron work, structural—contractors |
| 1731 | Intercommunication equipment installation—contractors | 5051 | Iron, pig—wholesale |
| 7622 | Intercommunication equipment repair | 5064 | Ironers, household: electric—wholesale |
| 5065 | Intercommunication equipment, electronic—wholesale | 9631 | Irrigation districts, nonoperating |
| 7399 | Interior decorators consulting service—not painters or paperhangers | 5083 | Irrigation equipment—wholesale |
| **** | Interior decorators, with stock: code according to the merchandise—retail | 1629 | Irrigation projects construction—general contractors |
| 7399 | Interior designing except painters and paperhangers | 4971 | Irrigation system operation |
| 9311 | Internal Revenue Service | 1321 | Isobutane (natural) production |
| 9311 | International Monetary Fund | 6725 | Issuing of face-amount installment certificates |
| 4131 | Interstate bus lines | | J |
| 9621 | Interstate Commerce Commission | 1499 | Jade mining |
| 4131 | Interurban bus lines | 9223 | Jails |
| 4011 | Interurban railways | 5211 | Jalousies—retail |
| 4441 | Intracoastal transportation | 4582 | Janitorial service on airplanes |
| 4452 | Intraport transportation | 7349 | Janitorial services, on a contract basis |
| 7299 | Invalid supplies rental | 5087 | Janitors' supplies—wholesale |
| 8999 | Inventors | 7929 | Jazz music groups or artists |
| 7399 | Inventory computing service | 1629 | Jetty construction—general contractors |
| 7393 | Investigators, private | 5094 | Jewelers' findings—wholesale |
| 6281 | Investment advisory service | 7631 | Jewelry repair shops |
| 6211 | Investment bankers | 5094 | Jewelry—wholesale |
| 6211 | Investment certificates, sale of | 5961 | Jewelry, mail order—retail |
| 6799 | Investment clubs | 5944 | Jewelry, precious stones and precious metals: including custom made—retail |
| 6159 | Investment companies, small business | 8331 | Job counseling |
| 6281 | Investment counselors | 8331 | Job training |
| 6211 | Investment firm—general brokerage | 7948 | Jockeys, horse racing |
| 6723 | Investment funds (management), closed-end | 1751 | Joinery, ship—contractors |
| 6722 | Investment funds (management), open-end | 7999 | Judo instruction |
| | | 8611 | Junior chambers of commerce |
| | | 8222 | Junior colleges |
| | | 5093 | Junk and scrap, general line—wholesale |
| | | 5133 | Jute piece goods, woven—wholesale |
| | | 8361 | Juvenile correctional homes |
| | | 9211 | Juvenile courts |
| | | 5712 | Juvenile furniture—retail |

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5712 Juvenile furniture—retail

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1455 Kaolin mining
 7999 Karate instruction
 0759 Kennels, boarding
 0279 Kennels, breeding and raising own stock
 7948 Kennels, dog racing
 1474 Kernite mining
 5172 Kerosene—wholesale
 7699 Key duplicating shops
 7374 Key punch service
 7996 Kiddie parks
 1629 Kiln construction—general contractors
 8211 Kindergartens
 5023 Kitchen tools and utensils—wholesale
 5723 Kitchens, complete (sinks, cabinets, etc.)—retail
 5719 Kitchenware stores—retail
 7699 Knife sharpening and repair shops
 5699 Knit dresses, made to order—retail
 5134 Knit fabrics—wholesale
 5949 Knitting yarn shops—retail
 5631 Knitwear stores, women's—retail
 1459 Kyanite mining

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7399 Labeling bottles, cans, cartons, etc., for the trade (not printing)
 5134 Labels, woven—wholesale
 7361 Labor contractors (employment agencies), except farm labor
 8631 Labor organizations
 7362 Labor pools
 9611 Labor Statistics, Bureau of
 8631 Labor unions
 9651 Labor-management negotiations boards
 8072 Laboratories, dental
 7391 Laboratories, industrial: except testing (not manufacturing auxiliaries)
 7819 Laboratories, motion picture (service)
 7391 Laboratories, research: commercial
 7397 Laboratories, testing of products (not manufacturing auxiliaries)
 8071 Laboratories: biological, medical, X-ray (picture and treatment)
 7391 Laboratory (physical) research and development
 0279 Laboratory animal farms (rats, mice, guinea pigs, etc.)
 5086 Laboratory equipment—wholesale
 7699 Laboratory instrument (except electric) repair
 0849 Lac production

5134 Lace fabrics—wholesale
 5198 Lacquers—wholesale
 5084 Ladders—wholesale
 5137 Ladies' handkerchiefs—wholesale
 5137 Ladies' purses—wholesale
 4441 Lake transportation, other than on the Great Lakes
 7399 Laminating of photographs (coating photographs with plastics)
 5719 Lamp and shade shops—retail
 5063 Lamp bulbs and similar electrical supplies—wholesale
 5023 Lamps: floor, boudoir, desk—wholesale
 1629 Land clearing—general contractors
 1629 Land drainage—general contractors
 1629 Land leveling (irrigation)—general contractors
 9512 Land management agencies—government
 5083 Land preparation machinery, agricultural—wholesale
 1629 Land reclamation—general contractors
 8911 Land surveying
 9211 Landlord-tenant courts
 0781 Landscape architects
 0781 Landscape counseling
 0781 Landscape planning
 8299 Language schools
 5085 Lapidary equipment—wholesale
 5147 Lard—wholesale
 1742 Lathing—contractors
 7218 Launderers, industrial
 7215 Launderettes
 7542 Laundries, automotive
 7215 Laundries, coin-operated
 7219 Laundries, except power and coin-operated
 7219 Laundries, hand
 7211 Laundries, power: family and commercial
 7215 Laundromats
 7211 Laundry collecting and distributing outlets, operated by power laundries
 5087 Laundry equipment and supplies—wholesale
 7215 Laundry machine routes, coin-operated
 5161 Laundry soap, chips, and powder—wholesale
 9229 Law Enforcement Assistance Administration (LEAA)
 8111 Law offices
 6611 Law offices, real estate, insurance, loans: combinations of
 0782 Lawn care
 0782 Lawn fertilizing services
 7699 Lawn mower repair shops

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5261	Lawn mowers—retail	6351	Liability insurance
0782	Lawn mowing services	8231	Libraries
0782	Lawn spraying services	9631	Licensing and inspection of utilities
0782	Lawn sprigging services	9651	Licensing and permit for professional occupations
5261	Lawn sprinklers—retail	9651	Licensing and permit for retail trade
8111	Lawyers	7393	Lie detection service
1799	Lead burning—contractors	6311	Life insurance
1031	Lead ore mining	6411	Life insurance agents
5052	Lead ore—wholesale	6311	Life insurance funds, savings bank
5051	Lead—wholesale	6311	Life insurance organizations, assessment
1031	Lead-zinc ore mining	6311	Life insurance organizations, cooperative
1389	Lease tanks, oil field: erecting, cleaning, and repairing: contract basis	6311	Life insurance organizations, fraternal
****	Leased departments in retail stores—code separately according to activity	6311	Life reinsurance
7374	Leasing of computer time	5084	Lift trucks—wholesale
7379	Leasing of computers, except finance leasing or by the manufacturer	1629	Light and power plant construction—general contractors
7394	Leasing of equipment, except automotive and computer related	5063	Light bulbs, electric—wholesale
7512	Leasing passenger cars, without drivers: except finance leasing	4453	Lighterage
7513	Leasing trucks, without drivers: except finance leasing	5199	Lighters, cigar and cigarette—wholesale
5199	Leather and cut stock—wholesale	5099	Lighting fixtures, gas—wholesale
5085	Leather belting, packing—wholesale	5063	Lighting fixtures: residential, commercial, and industrial—wholesale
5048	Leather goods made to individual order—retail	7349	Lighting maintenance service (bulb and fuse replacement and cleaning)
7699	Leather goods repair shops	1799	Lightning conductor erection—contractors
5199	Leather goods, except footwear, gloves, luggage, and belting—wholesale	1211	Lignite mining
7399	Lecture bureaus	1213	Lignite mining services: on a contract basis
8999	Lecturers	1213	Lignite or bituminous auger mining services: on a contract basis
8111	Legal aid services	1213	Lignite strip mining: on a contract basis
9222	Legal counsel offices—government	5211	Lime and plaster dealers—retail
6311	Legal reserve life insurance	0174	Lime groves and farms
8111	Legal services	1422	Lime rock, ground
9131	Legislative and executive office combinations	0711	Lime spreading
9121	Legislative assemblies	5191	Lime, agricultural—wholesale
7922	Legitimate theater producers	5089	Lime, except agricultural—wholesale
0174	Lemon groves and farms	1422	Limestone (except bituminous), crushed and broken—quarrying
8231	Lending libraries	1499	Limestone, bituminous—quarrying
0119	Lentil farms	1411	Limestone, dimension—quarrying
1479	Lepidolite mining	1422	Limestone, ground
6512	Lessors of piers, docks, and associated buildings and facilities	5331	Limited price variety stores—retail
6519	Lessors of property, except railroad, buildings or mobile home sites	1011	Limonite mining
6517	Lessors of railroad property	5133	Linen piece goods, woven—wholesale
7339	Letter writing service	5719	Linen shops—retail
7399	Lettering service	7213	Linen supply service
0161	Lettuce and romaine farms	5023	Linens—wholesale
1629	Levee construction—general contractors	5631	Lingerie and corset stores—retail
		5137	Lingerie—wholesale
		1752	Linoleum installation—contractors
		5713	Linoleum stores—retail

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5023 Linoleum—wholesale
 5199 Linseed oil—wholesale
 5984 Liquefied petroleum (LP) gas, delivered to customers' premises—retail
 4925 Liquefied petroleum (LP) gas, distribution through mains
 1821 Liquefied petroleum gases (natural) production
 7399 Liquidators of merchandise on a contract basis
 5921 Liquor and beer (packaged)—retail
 5182 Liquors, distilled—wholesale
 1479 Lithium mineral mining
 0751 Livestock breeding services, except for animal specialties
 0291 Livestock farms, general
 6131 Livestock loan companies
 5154 Livestock, except horses and mules—wholesale
 6331 Lloyd's organizations: fire, marine, casualty insurance
 4789 Loading and unloading freight cars (not truckers)
 1629 Loading station construction, mine—general contractors
 4463 Loading vessels
 6145 Loan (small) lenders, licensed
 6163 Loan agents
 6163 Loan brokers
 6131 Loan companies, agricultural
 6144 Loan companies, industrial: not engaged in deposit banking
 6131 Loan companies, livestock
 6162 Loan correspondents
 6159 Loan institutions, general and industrial
 6149 Loan societies, remedial
 6611 Loans, real estate, insurance, law offices: combinations of
 7392 Lobbyists
 0913 Lobsters, catching of
 4141 Local bus charter service
 4111 Local bus line operation
 4111 Local railway operation
 4212 Local trucking, without storage
 7699 Lock parts, made to individual order
 4222 Locker rental, cold storage
 7299 Locker rental, except cold storage
 4222 Locker rental, food
 1629 Locks, waterways, etc., construction—general contractors
 7699 Locksmith shops
 9223 Lockups
 1041 Lode gold mining
 7021 Lodging houses, except organization

7041 Lodging houses, organization
 4441 Log rafting and towing
 4212 Log trucking
 0171 Loganberry farms
 4013 Logging railroads
 1389 Logging wells: on a contract basis
 5099 Logs, hewn ties, posts, and poles—wholesale
 4213 Long distance trucking
 5984 LP gas, delivered to customers' premises—retail
 5172 Lubricants—wholesale
 5948 Luggage and leather goods stores—retail
 7699 Luggage repair shops
 5099 Luggage—wholesale
 5063 Lugs and connectors, electrical—wholesale
 5211 Lumber and building material dealers—retail
 5211 Lumber and planing mill product dealers—retail
 4226 Lumber terminals (storage for hire)
 5931 Lumber, used only—retail
 5031 Lumber: rough, dressed, and finished—wholesale
 5812 Lunch bars
 5812 Lunch counters
 5812 Lunch rooms
 5963 Lunch wagons, mobile—retail
 5812 Luncheonettes

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0722 Machine harvesting of fruits, berries, nuts, vegetables, sugar cane, etc.
 1796 Machine rigging—contractors
 5084 Machine tool accessories—wholesale
 5084 Machine tools—wholesale
 6159 Machinery and equipment finance leasing
 1796 Machinery dismantling—contractors
 1796 Machinery installation—contractors
 5084 Machinists' precision tools—wholesale
 0912 Mackerel, catching of
 5994 Magazine stands—retail
 5199 Magazines—wholesale
 5963 Magazines, house-to-house selling
 7929 Magicians
 9211 Magistrate courts
 1459 Magnesite mining
 5081 Magnetic recording tape—wholesale
 1011 Magnetite mining
 7361 Maid registries
 7349 Maid services, on a contract basis
 7331 Mail advertising service

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4212	Mail carriers, contract	1629	Marine construction—general contractors
5961	Mail order houses—retail (not including retail outlets)	9711	Marine Corps
7331	Mailing list compilers	8911	Marine engineering
5031	Mailing machines—wholesale	6331	Marine insurance and reinsurance
7331	Mailing service	5038	Marine propulsion machinery and equipment—wholesale
7379	Maintenance and repair of computers and related equipment	7399	Marine reporting
4172	Maintenance facilities for motor vehicle passenger transportation	4469	Marine salvaging
4463	Maintenance of piers and docks, including buildings and facilities	5541	Marine service stations—retail
7349	Maintenance, building: except repairs	5038	Marine supplies (dunnage)—wholesale
4959	Malaria control	5551	Marine supply dealers—retail
5199	Malt extract—wholesale	4469	Marine surveyors, except cargo
5199	Malt—wholesale	4454	Marine towing
7392	Management consulting service	4469	Marine wrecking: salvaging from sunken craft, removing underwater hazards
7392	Management engineering	4469	Marine wrecking: ships for scrap
6723	Management investment funds, closed-end	7392	Market analysis or research
6722	Management investment funds, open-end	0161	Market gardens
7392	Management service (operating staff not furnished)	9641	Marketing and consumer services—government
7941	Managers of individual professional athletes	1422	Marl, crushed and broken—quarrying
6211	Managers or agents for mutual funds	8321	Marriage (family) counseling services
6531	Managers, real estate	7299	Marriage bureaus
1061	Manganese ore mining	1741	Masonry—contractors
1011	Manganiferous ore mining, valued chiefly for iron content	5039	Masons' materials—wholesale
1061	Manganite mining	7299	Massage parlors
1623	Manhole construction—general contractors	7299	Masseuses
7399	Mannequin service	5034	Materials handling equipment—wholesale
5031	Mannequins—wholesale	9431	Maternity and child health program administration
7362	Manpower pools	3069	Maternity hospitals
8331	Manpower training	5621	Maternity shops—retail
1743	Mantel work—contractors	0181	Mats, preseeded: soil erosion—growing of
4925	Manufactured gas production and distribution	7699	Mattress renovating and repair shops
8611	Manufacturers' institutes	5712	Mattress stores, including custom made—retail
7399	Map drafting service	5021	Mattresses—wholesale
0849	Maple sap, gathering of	6553	Mausoleum operation
7399	Mapmaking, including aerial	1542	Mausoleum, cemetery: construction of—general contractors
5039	Marble building stone—wholesale	9211	Mayors' courts
1743	Marble installation, interior: including finishing—contractors	9111	Mayors' offices
1741	Marble work, exterior construction—contractors	5033	Measuring and testing equipment, electrical except automotive—wholesale
1429	Marble, crushed and broken—quarrying	5411	Meat (fresh) and grocery stores—retail
1411	Marble, dimension—quarrying	5423	Meat markets—retail
1479	Marcasite mining	5142	Meat pies, frozen—wholesale
4469	Marinas	5142	Meat, frozen: packaged—wholesale
4469	Marine basins, renting and operating	5147	Meats, cured or smoked—wholesale
4463	Marine cargo handling	5147	Meats, fresh—wholesale
		1711	Mechanical contractors
		7699	Mechanical measuring and controlling instrument repair

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- 7819 Media buying service
6324 Medical and hospital service plans
9441 Medical assistance program administration
8631 Medical associations
5086 Medical equipment and supplies—wholesale
5122 Medical glass—wholesale
8081 Medical insurance (providing services through own facilities)
6411 Medical insurance claims, processing of: contract or fee basis
8071 Medical laboratories (clinical)
8091 Medical photography and art
8922 Medical research, noncommercial (cancer, TB, etc.)
5122 Medical rubber goods—wholesale
5912 Medicine cabinet sundries—retail
5122 Medicine cabinet sundries—wholesale
1499 Meerschau mining or quarrying
0161 Melon farms
5611 Men's wearing apparel—retail
0912 Menhaden, catching of
9431 Mental health agencies—government
8063 Mental hospitals
7321 Mercantile credit reporting bureaus
6153 Mercantile financing
**** Merchandise or commodity brokers and dealers—code according to commodity
7392 Merchandising counsels
5962 Merchandising, automatic (sale of products through vending machines)
5699 Merchant tailors—retail
5159 Merchants of raw farm products, except cotton, grain, and livestock
8611 Merchants' associations, not engaged in credit investigations
1092 Mercury ore mining
5051 Mercury—wholesale
7392 Merger, acquisition and reorganization studies
5051 Mesh, wire: reinforcement—wholesale
7399 Messenger service, except telegraph and radio
5161 Metal cyanides—wholesale
1791 Metal furring—contractors
1081 Metal mining, prospect drilling for: on a contract basis
5161 Metal polishes—wholesale
5084 Metal refining machinery and equipment—wholesale
5161 Metal salts—wholesale
7399 Metal slitting and shearing on a contract basis
1799 Metal work, ornamental—contractors
5052 Metallic concentrates—wholesale
5052 Metallic ores, except precious—wholesale
5094 Metals, precious—wholesale
5719 Metalware stores—retail
5084 Metalworking machinery—wholesale
5084 Metalworking tools: drills, taps, dies, grinding wheels, files—wholesale
7699 Meteorological instrument repair
1499 Mica mining
1429 Mica schist, crushed and broken—quarrying
1411 Mica schist, dimension—quarrying
7399 Microfilm recording and developing service
1099 Microlite mining
7699 Microscope repair
8049 Midwives, offices of
8211 Military academies, elementary or secondary level
9211 Military courts
9711 Military training schools
5143 Milk and cream, fluid—wholesale
5451 Milk and other dairy products stores—retail
5143 Milk cooling stations, operated by farm assemblers
**** Milk cooling stations, operated by milk processors—code as auxiliary
5963 Milk delivery and sale of purchased milk, without processing
5143 Milk depots—wholesale
0241 Milk production
5084 Milk products manufacturing machinery and equipment—wholesale
0751 Milk testing, for butterfat, etc.
5083 Milking machinery and equipment—wholesale
5949 Mill end stores—retail
5085 Mill supplies—wholesale
5631 Millinery stores—retail
5137 Millinery supplies—wholesale
5137 Millinery—wholesale
0723 Milling of flour, feed, and grain: custom
1499 Millstone quarrying
5211 Millwork and lumber dealers—retail
5081 Millwork—wholesale
1796 Millwrights
7399 Mimeographing service
1081 Mine development, metal: on a contract basis
1481 Mine development, nonmetallic minerals except fuels: on a contract basis

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1061	Mine exploration, metal: on a contract basis	5999	Monuments, finished to custom order—retail
1461	Mine exploration, nonmetallic minerals except fuels: on a contract basis	6022	Morris plan banks (accepting deposits), members of Federal Reserve System
1629	Mine loading and discharging station construction—general contractors	6024	Morris plan banks (accepting deposits), not insured
1112	Mine tunneling, anthracite: on a contract basis	6023	Morris plan banks accepting deposits, insured: not members of Federal Reserve
1212	Mine tunneling, bituminous coal and lignite: on a contract basis	6144	Morris plan companies, not engaged in deposit banking
6211	Mineral leases, dealers in	6162	Mortgage agents of insurance companies
1479	Mineral pigment mining	6112	Mortgage associations: national, such as GNMA, FNMA, FHA
6211	Mineral royalties, dealers in	6162	Mortgage bankers
7999	Miniature golf course operation	6163	Mortgage brokers arranging for loans but using money of others
9651	Minimum wage program administration	6162	Mortgage brokers, using own money
1629	Mining appurtenance construction—general contractors	6131	Mortgage companies, farm
5062	Mining machinery and equipment—wholesale	6162	Mortgage companies, urban
6519	Mining properties, lessors of	6361	Mortgage insurance or guaranty
1212	Mining, bituminous coal and lignite, tunneling: on a contract basis	6162	Mortgage servicing
0271	Mink farms	6211	Mortgages, buying and selling (redicounting)
0279	Minnow farms	7261	Morticians
0129	Mint farms	5087	Morticians' goods—wholesale
7699	Mirror repair shops	1743	Mosaic work—contractors
5719	Mirrors and pictures, framed and unframed—retail	4959	Mosquito eradication
1629	Missile facilities construction and/or maintenance—general contractors	9631	Mosquito eradication districts
4999	Missile tracking stations, operated on a contract basis	0723	Moss ginning
5126	Mittens, men's and boys'—wholesale	5159	Moss—wholesale
5127	Mittens: women's, children's, and infants'—wholesale	1522	Motel construction: general contractors
7519	Mobile home rental (except on site)	7322	Motel management service, commercial—nonoperating
6515	Mobile home sites, operators of	7011	Motels
5271	Mobile homes, new and used—retail	7829	Motion picture booking agencies
9532	Model Cities agencies—government	5043	Motion picture cameras, equipment, and supplies—wholesale
7361	Model registries	7819	Motion picture casting bureaus
8299	Modeling (clothes) schools	7819	Motion picture consultants
7362	Modeling service	7819	Motion picture directors, independent
0214	Mohair production	7823	Motion picture distribution, exclusive of production, except for TV
5159	Mohair, raw—wholesale	7824	Motion picture distribution, exclusive of production, for TV
5199	Molasses, industrial—wholesale	7819	Motion picture equipment rental
1446	Molding sand mining	7832	Motion picture exhibitors for airlines
5031	Molding, sheet metal—wholesale	7833	Motion picture theaters, drive-in
1061	Molybdenite mining	7832	Motion picture exhibitors, itinerant
1061	Molybdenum ore mining	7829	Motion picture film delivery
1061	Molybdate mining	7823	Motion picture film exchanges
8661	Monasteries	7829	Motion picture film library
1009	Monasite mining	7819	Motion picture film processing, editing, and titling
6059	Money order issuance		

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- 7829 Motion picture film purchasing agencies
 7819 Motion picture laboratories (service)
 7818 Motion picture production and distribution, except for TV
 7814 Motion picture production, television (including distribution)
 5048 Motion picture studio and theater equipment—wholesale
 7832 Motion picture theaters, except drive-in
 7819 Motion picture titling
 5063 Motor controls, electric—wholesale
 5561 Motor home dealers—retail
 7519 Motor home rental
 7538 Motor repair, automotive
 5571 Motor scooters—retail
 5012 Motor scooters—wholesale
 5511 Motor vehicle dealers, new and used cars—retail
 5521 Motor vehicle dealers, used cars only—retail
 4131 Motor vehicle highway passenger transportation, intercity: special service
 9621 Motor vehicle licensing and inspection offices
 5064 Motor vehicle radios—wholesale
 5014 Motor vehicle tires and tubes—wholesale
 5012 Motor vehicles, commercial—wholesale
 7011 Motor-hotels
 5551 Motorboat dealers—retail
 5571 Motorcycle dealers—retail
 4212 Motorcycle delivery service
 7948 Motorcycle racing
 7999 Motorcycle rental
 7699 Motorcycle repair service
 5014 Motorcycle tires and tubes—wholesale
 5012 Motorcycles—wholesale
 5063 Motors, electric—wholesale
 7399 Mounting merchandise on cards: on a contract basis
 5063 Mowers, power—wholesale
 0762 Mowing highway center strips and edges
 1399 Mud service, oil field drilling: on a contract basis
 7539 Mufflers, automotive: sale and installation
 0272 Mule farms
 5150 Mules—wholesale
 8321 Multi-service centers (neighborhood)
 7339 Multigraphing service
 7339 Multilithing service
 9211 Municipal courts
 1499 Muscovite mining
 1542 Museum construction: general contractors
 7999 Museums, commercial
 8411 Museums, noncommercial
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 0182 Mushroom spawn, production of
 8999 Music arrangers
 7399 Music copying service
 7993 Music distribution systems, coin-operated
 7399 Music distribution systems, except coin-operated
 6794 Music licensing to radio stations
 6794 Music royalties, sheet and record
 8399 Music schools
 5199 Music, sheet—wholesale
 7699 Musical instrument repair shops
 5733 Musical instrument stores—retail
 5931 Musical instrument stores, secondhand—retail
 5099 Musical instruments—wholesale
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 6321 Mutual accident and health insurance
 6321 Mutual accident associations
 6149 Mutual benefit associations
 6331 Mutual fire, marine, and casualty insurance
 6723 Mutual fund sales on own account
 6211 Mutual funds, selling by independent salesmen
 6311 Mutual life insurance
 6033 Mutual savings banks, insured: not members of Federal Reserve System
 6032 Mutual savings banks, members of Federal Reserve System
 6034 Mutual savings banks, not insured

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- 5051 Nails—wholesale
 5172 Naphtha, except bulk stations and terminals—wholesale
 5113 Napkins, paper—wholesale
 9661 National Aeronautics and Space Administration
 6025 National banks, members of Federal Reserve System
 6027 National banks, not insured
 6026 National banks, not members of Federal Reserve System: insured
 9711 National Guard
 6112 National mortgage associations such as GNMA, FNMA, FHA
 9611 National Science Foundation
 1499 Natural abrasives (except sand) mining
 1623 Natural gas compressing station construction—general contractors
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- 6311 Oil and gas lease brokers
 4326 Oil and gasoline storage caverns (for hire)
 7699 Oil burner repair service
 5074 Oil burners—wholesale
 1382 Oil exploration: on a contract basis
 7394 Oil field equipment rental
 5159 Oil kernels—wholesale
 6792 Oil leases, buying and selling on own account
 5159 Oil nuts—wholesale
 6519 Oil properties, lessors of
 1639 Oil refinery construction—general contractors
 5084 Oil refining machinery, equipment, and supplies—wholesale
 6311 Oil royalties, dealers in
 6792 Oil royalty companies
 1389 Oil sampling service for oil companies: on a contract basis
 1311 Oil sand mining
 5159 Oil seeds—wholesale
 1311 Oil shale mining
 4469 Oil spill cleanup
 7394 Oil well drilling equipment rental: machinery, drilling bits, etc.
 1381 Oil well drilling: on a contract basis
 1389 Oil well logging: on a contract basis
 5084 Oil well machinery, equipment, and supplies—wholesale
 1389 Oil well rig building, repairing, and dismantling: on a contract basis
 5084 Oil well supply houses—wholesale
 5093 Oil, waste—wholesale
 5199 Oils, except cooking: animal and vegetable—wholesale
 1499 Oilstone quarrying
 8321 Old age assistance
 8361 Old soldiers' homes
 5149 Oleomargarine—wholesale
 0179 Olive groves and farms
 1459 Olivine (nongem) mining
 1521 One-family house construction—general contractors
 0161 Onion farms
 1429 Onyx marble, crushed and broken—quarrying
 1411 Onyx marble, dimension—quarrying
 7833 Open air motion picture theaters
 7922 Opera companies
 4463 Operation of piers and docks, including buildings and facilities
 6513 Operation of retirement hotels
 7372 Operations research, computer systems design
 7392 Operations research, except computer systems design
 1531 Operative builders on own account
 6513 Operators of apartment buildings (5 or more housing units)
 6513 Operators of apartment hotels
 6512 Operators of commercial and industrial buildings
 6514 Operators of dwellings (4 or fewer housing units)
 6515 Operators of mobile home sites
 6512 Operators of nonresidential buildings
 6514 Operators of residential buildings (4 or fewer housing units)
 6513 Operators of residential hotels
 5086 Ophthalmic goods—wholesale
 7392 Opinion research
 8011 Ophthalmologists, offices of
 5999 Optical goods stores—retail
 5086 Optical goods, except cameras—wholesale
 5086 Optometric equipment and supplies—wholesale
 8042 Optometrists, offices of
 0174 Orange groves and farms
 0762 Orchard management and maintenance, with or without crop services
 **** Orchards—see type of orchard
 7929 Orchestras
 5961 Order taking offices of mail order houses—retail
 7699 Organ tuning and repair
 5161 Organic chemicals, synthetic—wholesale
 7041 Organization hotels
 7041 Organization lodging houses
 0783 Ornamental bush planting, pruning, bracing, spraying, and surgery
 1799 Ornamental metal work—contractors
 0783 Ornamental tree planting, pruning, bracing, spraying, and surgery
 8361 Orphanages
 9211 Orphan's courts
 8021 Orthodontists, offices of
 5999 Orthopedic and artificial limb stores—retail
 5086 Orthopedic equipment and supplies—wholesale
 8069 Orthopedic hospitals
 1099 Osunium ore mining
 8031 Osteopathic physicians, offices of

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STANDARD INDUSTRIAL CLASSIFICATION

8061 Outpatient treatment clinics for alcoholism
 8061 Outpatient treatment clinics for drugs
 5551 Outboard motor dealers—retail
 5041 Outboard motors—wholesale
 7812 Outdoor advertising service
 5136 Outerwear, men's and boys'—wholesale
 5137 Outerwear: women's, children's, and infants'—wholesale
 1629 Oven construction, bakers'—general contractors
 1629 Oven construction, for industrial plants—general contractors
 4212 "Over the road" trucking
 1112 Overburden removal for anthracite: on a contract basis
 1212 Overburden removal for bituminous coal: on a contract basis
 1081 Overburden removal for metal mining: on a contract basis
 1481 Overburden removal for nonmetallic minerals except fuels: on contract
 5136 Overcoats, men's and boys'—wholesale
 9721 Overseas Private Investment Corporation
 8091 Oxygen tent service
 5812 Oyster bars
 0912 Oyster beds
 0919 Oyster shells, dredging for
 0912 Oysters, dredging or tonging of
 1499 Ozokerite mining

P

7999 Pack trains, for amusement
 4212 Package delivery, by truck
 7399 Packaging and labeling service (not packing and crating)
 0723 Packaging fresh or farm-dried fruits and vegetables
 7399 Packaging service, all types
 0723 Packing fruits and vegetables
 4753 Packing goods for shipping
 5065 Packing, hose, and belting: industrial—wholesale
 1799 Paint and wallpaper stripping (removal)—contractors
 5231 Paint brushes, rollers, and sprayers—retail
 5196 Paint brushes, rollers, sprayers—wholesale
 7535 Paint shops, automotive
 5084 Paint spray equipment, industrial—wholesale
 5231 Paint stores—retail

1721 Painting of buildings and other structures except roofs—contractors
 1721 Painting ships—contractors
 1721 Painting traffic lanes—contractors
 5196 Paints—wholesale
 1099 Palladium ore mining
 5063 Panelboards—wholesale
 5112 Paper and plastic bags—wholesale
 5112 Paper boxes—wholesale
 1455 Paper clay mining
 5112 Paper cups, dishes, napkins, towels, and patterns—wholesale
 1721 Paper hanging—contractors
 5084 Paper manufacturing machinery—wholesale
 1541 Paper pulp mill construction: general contractors
 5111 Paper, fine or printing and writing—wholesale
 5093 Paper, waste—wholesale
 5112 Paper, wrapping or coarse, and products—wholesale
 5112 Paperboard and products—wholesale
 7999 Parachute training (for pleasure)
 4212 Parcel delivery, by truck
 7399 Parcel packing service (packaging)
 8041 Parent-teachers associations
 6159 Pari-mutuel totalizator equipment finance leasing and maintenance
 9211 Parish courts
 1611 Parking lot construction—general contractors
 1799 Parking lot maintenance (repaving, painting parking zones, repair, etc.)
 7523 Parking lots
 7525 Parking structures
 7299 Parking, valet
 1611 Parkway construction—general contractors
 4789 Parlor car services, not performed by line-haul railroad companies
 8399 Parole offices
 1752 Parquet flooring—contractors
 7394 Party supplies rental
 5963 Party-plan merchandising—retail
 1542 Passenger and freight terminal building construction—general contractors
 7512 Passenger car leasing, except finance leasing: without drivers
 7512 Passenger car rental, without drivers
 4511 Passenger carriers, air: certificated
 4111 Passenger transportation, regular route: between airports and terminals
 7221 Passport photographers

ALPHABETIC INDEX, NONMANUFACTURING INDUSTRIES

407

- 7399 Patent brokers
 6794 Patent buying and licensing
 6794 Patent leasing
 5122 Patent medicines—wholesale
 8111 Patent solicitors' offices
 8071 Pathological laboratories
 8011 Pathologists, offices of
 7399 Patrol of electric transmission or gas lines
 5113 Patterns, paper—wholesale
 1611 Paving construction—general contractors
 5931 Pawnshops
 8931 Payroll accounting service
 0119 Pea (dry field and seed) farms
 9721 Peace Corps
 0175 Peach orchards and farms
 0139 Peanut farms
 5159 Peanuts (bulk), unroasted—wholesale
 0722 Peanuts, machine harvesting of
 0175 Pear orchards and farms
 7631 Pearl restringing, for the trade
 0919 Pearls, cultured: production of
 1499 Peat grinding
 1499 Peat humus mining
 1499 Peat mining
 1442 Pebble mining
 0173 Pecan groves and farms
 0723 Pecan hulling and shelling
 5159 Pecan shellers—wholesale
 0752 Pedigree record services for pets and other animal specialties
 0751 Pedigree record services, for cattle, hogs, sheep, goats, and poultry
 1459 Pegmatite (feldspar) mining
 5159 Pelts—wholesale
 5943 Pen and pencil shops—retail
 5112 Pencils, mechanical—wholesale
 9223 Penitentiaries
 6411 Pension and retirement plan consultants
 6371 Pension funds
 9211 People's courts
 5064 Percolators, electric—wholesale
 1339 Perforating well casings: on a contract basis
 6794 Performance rights, publishing and licensing of
 5122 Perfumes—wholesale
 1499 Perlite mining
 0175 Persimmon orchards and farms
 8811 Personal affairs management
 8059 Personal care facilities with health care
 8059 Personal care homes with health care
 8299 Personal development schools
 6145 Personal finance companies (small loan, licensed)
 6711 Personal holding companies
 7399 Personal investigation service, except credit
 6733 Personal investment trusts, management
 7299 Personal shopping service
 9199 Personnel agencies—government
 9199 Personnel boards—government
 7392 Personnel management service
 7392 Personnel training and consulting
 7342 Pest control in structures
 0851 Pest control, forest
 5191 Pesticides—wholesale
 5999 Pet food stores—retail
 5999 Pet shops—retail
 4226 Petroleum and chemical bulk stations and terminals for hire
 5172 Petroleum and its products, except bulk stations and terminals—wholesale
 5172 Petroleum brokers—wholesale
 5171 Petroleum bulk stations and terminals—wholesale
 8911 Petroleum engineering
 4612 Petroleum pipe lines, crude
 4613 Petroleum pipe lines, refined
 1311 Petroleum production, crude
 1629 Petroleum refinery construction—general contractor
 1541 Pharmaceutical manufacturing plant construction: general contractors
 5122 Pharmaceuticals—wholesale
 0259 Pheasant farms
 5999 Philatelist and autograph supply stores—retail
 1499 Phlogopite mining
 7622 Phonograph (including stereo, hi-fi, tape recorder) repair
 5931 Phonograph and phonograph record stores, secondhand—retail
 5733 Phonograph record stores—retail
 5999 Phonograph records—wholesale
 5732 Phonograph stores—retail
 5064 Phonographs—wholesale
 5081 Phonographs, coin-operated—wholesale
 1475 Phosphate rock mining
 5191 Phosphate rock, ground—wholesale
 5081 Photocopy machines—wholesale
 7332 Photocopying service
 8911 Photogrammetric engineering
 7399 Photogrammetric mapping service (not professional engineers)
 7395 Photograph developing and retouching
 7221 Photographers, school

5043	Photographic cameras, projectors, equipment, and supplies—wholesale	4469	Piloting vessels in and out of harbors
7396	Photographic laboratories (not manufacturing)	0843	Pine gum, extraction of
7399	Photographic library service	0179	Pineapple farms
7333	Photographic studios, commercial	7999	Ping pong parlors
7221	Photographic studios, portrait	1459	Pinite mining
5946	Photographic supply stores—retail	5874	Pipe and boiler covering—wholesale
7399	Photography brokers	1799	Pipe and boilers, insulation of: contractors
7333	Photography, aerial: except map making	1711	Pipe and duct work—contractors
7333	Photography, commercial	5051	Pipe and tubing, steel—wholesale
4899	Phototransmission services	1799	Pipe covering—contractors
7999	Phrenologists	1623	Pipe laying—general contractors
7391	Physical (laboratory) research and development	1623	Pipe line construction—general contractors
7999	Physical culture schools (gymnasiums)	4619	Pipe line operation, except petroleum and natural gas pipe lines
8011	Physicians (M.D.), including specialists: offices of	4789	Pipe line terminal facilities independently operated
5086	Physicians' equipment and supplies—wholesale	1623	Pipe line wrapping—general contractors
8999	Physicists, consulting: not connected with business service laboratories	4613	Pipe lines (common carriers) gasoline
8049	Physiotherapists, offices of	4612	Pipe lines, crude petroleum
7394	Piano rental	4922	Pipe lines, natural gas
7699	Piano tuning and repair	4613	Pipe lines, refined petroleum
5733	Pianos—retail	1389	Pipe testing—oil field service: on a contract basis
5149	Pickles, preserves, jellies, jams, and sauces—wholesale	5051	Pipe, cast iron—wholesale
7212	Pickup and delivery station laundry not operated by laundries	5199	Pipes, smokers'—wholesale
7999	Picnic grounds operation	1499	Pipestone mining
7699	Picture framing to individual order, not connected with retail stores	5085	Pistons and valves—wholesale
5719	Pictures and mirrors, framed and unframed—retail	1094	Pitchblende mining
5949	Piece goods—retail	5812	Pizzerias
5133	Piece goods, woven—wholesale	1041	Placer gold mining
1629	Pier construction—general contractors	7999	Planetaria, commercial
****	Piers and docks, operated by oil firms—code as auxiliary to tanker fleets	8411	Planetaria, noncommercial
7996	Piers, amusement	5211	Planing mill products and lumber dealers—retail
4463	Piers, including buildings, and facilities: operation and maintenance	5031	Planing mill products—wholesale
5142	Pies, fruit: frozen—wholesale	9531	Planning and development of housing programs
5051	Pig iron—wholesale	7392	Planning consultants
0259	Pigeon farms	5083	Planting machinery and equipment—wholesale
5198	Pigments and colors—wholesale	0721	Planting, with/without fertilizing
0912	Pilchard, catching of	0181	Plants, ornamental: growing of
1629	Pile driving—general contractors	5992	Plants, potted—retail
1629	Piling, driving—general contractors	5199	Plants, potted—wholesale
5051	Piling, iron and steel—wholesale	0181	Plants, potted: growing of
7219	Pillow cleaning and renovating	5039	Plaster—wholesale
7299	Pillow rental service	1742	Plastering, plain or ornamental—contractors
5623	Pillowcases—wholesale	1453	Plastic fire clay mining
		5199	Plastic foam—wholesale
		5133	Plastic piece goods, woven—wholesale
		8011	Plastic surgeons, offices of

ALPHABETIC INDEX, NONMANUFACTURING INDUSTRIES

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- 1799 Plastic wall tile installation—contractors
 5161 Plastics materials—wholesale
 6331 Plate glass insurance
 5039 Plate glass—wholesale
 5051 Plates, metal—wholesale
 1099 Platinum group ore mining
 5941 Playground equipment—retail
 7922 Plays (road companies and stock companies)
 7399 Playwrights' brokers
 0711 Plowing
 1389 Plugging and abandoning wells: on a contract basis
 0175 Plum orchards and farms
 5074 Plumbers' brass goods, fittings, and valves—wholesale
 1711 Plumbing and heating (except electric) contractors
 5074 Plumbing fixtures, equipment, and supplies—wholesale
 1711 Plumbing repair—contractors
 1711 Plumbing, with or without sheet metal work—contractors
 5031 Plywood—wholesale
 1796 Pneumatic tube system installation—contractors
 7609 Pocketbook repair shops
 8049 Podiatrists, offices of
 8699 Poetry associations
 1623 Pole line construction—general contractors
 5063 Pole line hardware—wholesale
 9211 Police courts
 9221 Police departments
 6411 Policyholders' consulting service
 8451 Political organizations and clubs
 0721 Pollinating
 9511 Pollution control agencies
 6175 Pomegranate orchards and farms
 1629 Pond construction—general contractors
 0272 Pony farms
 5941 Pool and billiard table stores—retail
 7932 Pool parlors
 7519 Pop-up campers, rental
 5012 Pop-up campers—wholesale
 0119 Popcorn farms
 5441 Popcorn stands—retail
 5145 Popcorn—wholesale
 7929 Popular music groups or artists
 9421 Port authorities and districts, nonoperating
 7299 Porter service
 5181 Porter—wholesale
 7299 Portrait copying
 7221 Portrait photographers
 5099 Portraits—wholesale
 7399 Post office contract stations
 1542 Post offices: new construction, remodeling, etc.—general contractors
 4311 Postal Service, U.S.
 7312 Poster advertising service, outdoor
 7319 Poster advertising services, except outdoor
 1799 Posthole digging—contractors
 1474 Potash mining
 1474 Potassium compounds (natural) mining
 0134 Potato (Irish) farms
 4221 Potato cellars
 5145 Potato chips—wholesale
 0723 Potato curing
 5992 Potted plants—retail
 5719 Pottery stores—retail
 5499 Poultry and egg dealers—retail
 5063 Poultry equipment—wholesale
 0254 Poultry hatcheries
 5142 Poultry pies, frozen—wholesale
 5144 Poultry products—wholesale
 5063 Poultry raising equipment—wholesale
 5144 Poultry: live, dressed, or frozen (except packaged)—wholesale
 1796 Power generating equipment installation—contractors
 7211 Power laundries, family and commercial
 5087 Power laundry equipment and supplies—wholesale
 1623 Power line construction—general contractors
 5261 Power mowers—retail
 1629 Power plant construction—general contractors
 5084 Power plant machinery, except electrical—wholesale
 5251 Power tools—retail
 5063 Power transmission equipment, electric—wholesale
 5065 Power transmission equipment, mechanical—wholesale
 4911 Power, electric: generation, transmission, or distribution
 1499 Pozzolana mining
 4742 Precooling of fruits and vegetables in connection with transportation
 5094 Precious metals—wholesale
 5094 Precious stones (gems)—wholesale
 1499 Precious stones mining
 7699 Precision instrument repair
 5064 Precision tools, machinists'—wholesale

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STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|---|------|--|
| 1541 | Prefabricated building erection, industrial—general contractors | 5043 | Projection apparatus, motion picture and slide: photographic—wholesale |
| 1542 | Prefabricated building erection, other nonresidential—general contractors | 7399 | Promoters of home shows, flower shows, etc. |
| 1522 | Prefabricated building erection, other residential: general contractors | 7941 | Promoters, sports events |
| 5211 | Prefabricated buildings—retail | 7392 | Promotion service (business service) |
| 5039 | Prefabricated buildings—wholesale | 1321 | Propane (natural) production |
| 1521 | Prefabricated single-family house erection—general contractors | 5094 | Propane gas, bottled—retail |
| 1111 | Preparation plants, anthracite | 6331 | Property damage insurance |
| 8211 | Preparatory schools | 9311 | Property tax assessors' offices |
| 8351 | Preschool centers | 5122 | Proprietary (patent) medicines—wholesale |
| 9111 | President's office | 5912 | Proprietary (patent medicines) stores—retail |
| 7399 | Press clipping service | 1081 | Prospect drilling for metal mining: on a contract basis |
| 7351 | Press services (news syndicate) | 1481 | Prospect drilling for nonmetallic minerals except fuels: on contract basis |
| 7212 | Press shops (for garments) | 6281 | Protective committees, security holders' |
| 5463 | Pretzel stores or stands—retail | 7393 | Protective devices, mechanical: operation and maintenance |
| 5149 | Pretzels—wholesale | 7393 | Protective services |
| 9651 | Price control agencies | 0175 | Prune orchards and farms |
| 5043 | Printing apparatus, photographic—wholesale | 0721 | Pruning of orchard trees and vines |
| 5111 | Printing paper—wholesale | 1061 | Pallomelane mining |
| 5084 | Printing trades machinery, equipment and supplies—wholesale | 8063 | Psychiatric hospitals |
| 9223 | Prison farms | 8011 | Psychiatrists, offices of |
| 9223 | Prisons | 8011 | Psychoanalysts, offices of |
| 6023 | Private (unincorporated) banks, insured by the FDIC | 8049 | Psychologists, clinical: offices of |
| 6023 | Private (unincorporated) banks, not insured by the FDIC | 8990 | Psychologists, industrial |
| 9211 | Probate courts | 8049 | Psychotherapists (not M.D.), offices of |
| 8399 | Probation offices | 8931 | Public accountants, certified |
| 7399 | Process serving service | 5065 | Public address equipment—wholesale |
| 7819 | Processing of motion picture film | 7622 | Public address system repair |
| 7399 | Produce weighing service, not connected with transportation | 5021 | Public building furniture—wholesale |
| 4925 | Production and distribution of manufactured gas | 9222 | Public defenders' offices |
| 6181 | Production credit associations (agricultural) | 9431 | Public health agencies |
| 7911 | Professional dancing schools | 7392 | Public opinion research |
| 5086 | Professional equipment and supplies—wholesale | 9222 | Public prosecutors' offices |
| 8621 | Professional membership organizations | 7392 | Public relations service |
| 7941 | Professional or semiprofessional sports clubs | 9229 | Public safety bureaus |
| 8221 | Professional schools: dental, engineering, law, medical, etc. | 8299 | Public speaking schools |
| 7999 | Professional sports instructors for golf, skiing, swimming | 7339 | Public stenographers |
| 7392 | Programmed instruction service | 8611 | Public utility associations |
| 7372 | Programming services, computer | 9631 | Public utility commissions |
| | | 6711 | Public utility holding companies |
| | | 6519 | Public utility property, lessors of |
| | | 9441 | Public welfare administration, nonoperating |
| | | 8321 | Public welfare centers (offices) |
| | | 7313 | Publishers' representatives, advertising |
| | | 1389 | Pulling oil well casing: on a contract basis |

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5084 Pulp (wood) manufacturing machinery—wholesale
 1499 Pulpstone quarrying
 5084 Pulverizing machinery and equipment—wholesale
 1499 Pumice mining
 1499 Pumicite mining
 1389 Pumping of oil and gas wells: on a contract basis
 1112 Pumping or draining of anthracite mines: on a contract basis
 1313 Pumping or draining of bituminous coal lignite mines: on a contract basis
 1081 Pumping or draining of metal mines: on a contract basis
 1481 Pumping or draining of nonmetallic mineral (except fuels) mines: contract
 1623 Pumping station construction—general contractors
 5084 Pumps and pumping equipment—wholesale
 7374 Punch card services, punching and processing
 6153 Purchasers of accounts receivable and commercial paper
 9199 Purchasing and supply agencies—government
 ***** Purchasing offices of operating establishments—code as auxiliary
 1479 Pyrites mining
 1081 Pyrolusite mining
 1496 Pyrophyllite mining
 1479 Pyrrhotite mining

Q

0259 Quail farms
 5082 Quarrying machinery and equipment—wholesale
 9211 Quarterly courts
 1499 Quartz crystal (pure) mining
 1429 Quartzite, crushed and broken—quarrying
 1411 Quartzite, dimension—quarrying
 1092 Quicksilver (mercury) ore mining
 7299 Quilting for individuals
 6175 Quince orchards and farms
 6281 Quotation service

R

0271 Rabbit farms
 7948 Race car drivers and owners
 7948 Race horse owners

7948 Race track operation: horse, dog, auto, etc.
 7399 Racetrack cleaning, except buildings
 7948 Racing stables, operation of
 4899 Radar station operation
 7397 Radiation dosimetry laboratories—commercial
 7539 Radiator repair shops, automotive
 5074 Radiators and parts, heating—wholesale
 7922 Radio and television employment agencies
 7922 Radio and television program producers
 1623 Radio and television transmitting tower construction—general contractors
 7399 Radio broadcasting music checkers
 4899 Radio broadcasting operated by cab companies
 4882 Radio broadcasting stations
 8999 Radio commentators
 7392 Radio consultants
 5065 Radio parts and accessories—wholesale
 5065 Radio receiving and transmitting tubes—wholesale
 7623 Radio repair shops
 7313 Radio representatives, advertising
 5782 Radio stores—retail
 4821 Radio telegraph
 4811 Radio telephone
 7399 Radio transcription service
 5782 Radio-phonograph stores—retail
 4853 Radioactive waste materials, disposal
 7397 Radiographing welded joints on pipes and fittings
 8011 Radiologists, offices of
 5064 Radios—wholesale
 1094 Radium ore mining
 5093 Rags—wholesale
 9621 Railroad and warehouse commissions
 4742 Railroad car cleaning, icing, ventilating, and heating
 4742 Railroad car rental, with care of lading
 4743 Railroad car rental, without care of lading
 1629 Railroad construction—general contractors
 5088 Railroad equipment and supplies—wholesale
 4452 Railroad ferries
 4723 Railroad freight agencies, not operated by railroad companies
 6517 Railroad property, lessors of
 4013 Railroad switching
 4013 Railroad terminals

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STANDARD INDUSTRIAL CLASSIFICATION

- 4722 Railroad ticket offices, not operated by transportation companies
 4013 Railroads, belt line
 **** Railroads, class I—supplementary code for industry 4011
 **** Railroads, class II—supplementary code for industry 4011
 4011 Railroads, electric
 4011 Railroads, line-haul operating
 4011 Railroads, steam
 5051 Rails and accessories—wholesale
 4041 Railway express service
 4111 Railway operation, local
 1629 Railway roadbed construction—general contractors
 4011 Railways, interurban
 5699 Raincoat stores—retail
 **** Ranches—see type of ranch
 5064 Ranges, electric—wholesale
 5074 Ranges, except electric—wholesale
 5722 Ranges, gas and electric—retail
 5931 Rare book stores
 1099 Rare-earths ore mining
 0171 Raspberry farms
 4723 Rate services, transportation
 6411 Ratemaking organizations, insurance
 0279 Rattlesnake farms
 5133 Rayon piece goods, woven—wholesale
 5199 Rayon yarns—wholesale
 5122 Razor blades—wholesale
 5064 Razors, electric—wholesale
 5122 Razors, nonelectric—wholesale
 4041 REA Express
 8299 Reading schools
 5621 Ready-to-wear stores, women's—retail
 6531 Real estate appraisers
 6531 Real estate agents, brokers, and managers
 6531 Real estate auction
 8611 Real estate boards
 6531 Real estate brokers
 6531 Real estate buying agents
 6799 Real estate investment trusts
 6531 Real estate managers
 6531 Real estate rental agents
 6531 Real estate selling agents
 6561 Real estate title insurance
 6611 Real estate, insurance, loans, law offices: combinations of
 6553 Real property subdividers and developers, cemetery lots only
 6552 Real property subdividers and developers, except of cemetery lots
 6531 Real estate escrow agents
 7699 Rebabbling
 7534 Rebuilding and retreading tires for the trade
 5084 Rebuilding and sale of oil field tool joints—wholesale
 7694 Rebuilding motors, other than automotive
 7534 Rebuilding tires
 7534 Recapping tires
 5084 Recapping machinery, for tires—wholesale
 5063 Receptacles, electrical—wholesale
 6321 Reciprocal inter-insurance exchanges, accident and health insurance
 6351 Reciprocal inter-insurance exchanges, surety and fidelity insurance
 6331 Reciprocal inter-insurance exchanges: fire, marine, and casualty insurance
 5093 Reclaiming iron and steel scrap from slag—wholesale
 1629 Reclamation projects construction—general contractors
 5961 Record, clubs, mail order—retail
 5733 Record stores—retail
 9211 Recorders courts
 5084 Recording instruments and accessories—wholesale
 7399 Recording studios, not making commercial records
 5081 Recording tape, magnetic—wholesale
 1111 Recovery of anthracite from culm banks, except on a contract basis
 7997 Recreation and sports clubs, membership
 7032 Recreational camps
 7011 Recreational hotels
 9512 Recreational program administration
 7396 Redemption of trading stamps
 9532 Redevelopment land agencies
 6112 Rediscounting and financing for nonagricultural credit agencies except banks
 1381 Redrilling oil and gas wells: on a contract basis
 7299 Reducing salons
 1499 Reed peat mining
 8111 Referees in bankruptcy
 8321 Referral services for personal and social problems
 4613 Refined petroleum pipe lines
 0851 Reforestation
 9223 Reformatories
 5085 Refractory material—wholesale
 5812 Refreshment stands
 4222 Refrigerated warehousing
 1711 Refrigeration and freezer work—contractors

ALPHABETIC INDEX, NONMANUFACTURING INDUSTRIES

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- 7623 Refrigeration repair service, electric
 7623 Refrigerator (electric) repair service
 5722 Refrigerators and related electric and gas appliances—retail
 5078 Refrigerators, commercial: reach-in and walk-in—wholesale
 5064 Refrigerators, household: electric and gas—wholesale
 8321 Refugee services
 4953 Refuse systems
 6055 Regional clearinghouse associations
 8049 Registered nurses, offices of
 7361 Registries, nurses'
 9641 Regulation and inspection of agricultural products
 9631 Regulation of utilities
 8361 Rehabilitation (residential) centers, with health care incidental
 8081 Rehabilitation centers, outpatient (medical treatment)
 5051 Reinforcement mesh, wire—wholesale
 6311 Reinsurance, life
 6331 Reinsurance: fire, marine, and casualty
 8321 Relief services, temporary
 8661 Religion schools, operated by religious organizations
 5942 Religious book stores—retail
 5999 Religious goods stores—retail
 7818 Religious motion picture production, except for TV
 8661 Religious organizations
 5086 Religious supplies—wholesale
 6732 Religious trusts, management of
 6149 Remedial loan societies
 5949 Remnant stores—retail
 1541 Remodeling buildings, industrial and warehouse—general contractors
 1542 Remodeling buildings, other nonresidential—general contractors
 1522 Remodeling buildings, other residential—general contractors
 1521 Remodeling buildings, single-family—general contractors
 1389 Removal of condensate gasoline from field (gathering) lines: contract
 1112 Removal of overburden for anthracite: on a contract basis
 1213 Removal of overburden for bituminous coal: on a contract basis
 1081 Removal of overburden for metal mining: on a contract basis
 1481 Removal of overburden for nonmetallic minerals except fuels: on contract
 7699 Renedding work
 5199 Bennet—wholesale
 1541 Renovating buildings, industrial and warehouse—general contractors
 1542 Renovating buildings, other nonresidential—general contractors
 1522 Renovating buildings, other residential—general contractors
 1521 Renovating buildings, single-family—general contractors
 9651 Rent control agencies
 7512 Rent-a-car service
 6531 Rental agents for real estate
 7394 Rental and servicing of electronic equipment, except computers
 7512 Rental of automobiles, without drivers
 7999 Rental of beach chairs and accessories
 7999 Rental of bicycles
 8231 Rental of books
 7299 Rental of clothing
 7394 Rental of coin-operated machines
 4222 Rental of cold storage lockers
 7374 Rental of computer time
 7379 Rental of computers, except finance leasing or by the manufacturer
 7394 Rental of construction equipment
 7394 Rental of dishes, silverware, tables, and banquet accessories
 7021 Rental of furnished rooms
 7394 Rental of furniture
 7999 Rental of golf carts
 4119 Rental of hearses and limousines, with drivers
 7299 Rental of items for personal use by individuals, except for recreation
 7819 Rental of motion picture equipment
 7824 Rental of motion picture film for TV
 7823 Rental of motion picture film, except film for TV
 7394 Rental of oil field equipment
 4119 Rental of passenger automobiles, with drivers
 7299 Rental of pillows
 4742 Rental of railroad cars, with care of lading
 4743 Rental of railroad cars, without care of lading
 7999 Rental of rowboats and canoes
 7999 Rental of saddle horses
 7922 Rental of theatrical scenery
 7394 Rental of tools
 7519 Rental of trailers
 4212 Rental of trucks with drivers
 7513 Rental of trucks, without drivers
 4469 Rental or charter of commercial boats

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STANDARD INDUSTRIAL CLASSIFICATION

7519	Renting automobile utility trailers	6514	Residential buildings, operators of (4 or fewer housing units)
7519	Renting travel, camping, or recreational trailers	1531	Residential construction, single-family—general contractors
7392	Reorganization service (business)	1532	Residential construction, except single-family—general contractors
7379	Repair and maintenance of computers and related equipment	8811	Residential farms, noncommercial
5014	Repair materials, tire and tube—wholesale	6513	Residential hotels, operation of
7699	Repair of calipers, gauges, and other machinists precision instruments	1752	Resilient floor laying—contractors
7692	Repair of cracked castings (welding service)	5161	Resins, synthetic—wholesale
7219	Repair of fur garments	8069	Rest homes, with health care
7641	Repair of furniture upholstery	8361	Rest homes, with health care incidental
7699	Repair of optical instruments	7342	Rest room cleaning service
7699	Repair of photographic equipment	7299	Rest room operation
1761	Repair of roofs—contractors	1542	Restaurant construction: general contractors
7699	Repair of service station equipment	5081	Restaurant equipment (except furniture)—wholesale
7699	Repair of speedometers	5812	Restaurants
7533	Repair shops, automotive: general	5812	Restaurants, carry-out
7217	Repairing and cleaning plants, rug and carpet	7641	Restoration and repair of antique furniture
1389	Repairing lease tanks, oil field: on a contract basis	7699	Restoration and repair of antiques, except furniture
1541	Repairing buildings, industrial and warehouse—general contractors	1611	Resurfacing streets and highways—general contractors
1542	Repairing buildings, other nonresidential—general contractors	5463	Retail bakeries—selling only
1522	Repairing buildings, other residential—general contractors	6512	Retail establishments, property operation only
1521	Repairing buildings, single-family—general contractors	1741	Retaining wall construction—contractors
7322	Repertory or stock companies, theatrical	6513	Retirement hotels, operation of
5065	Replacement parts, electronic—wholesale	7534	Retreading tires
7699	Replating shops (chromium, gold, silver, etc.) on a custom basis	0723	Retting flax
7399	Repossession service	7641	Reupholstery shops
7999	Reptile or animal exhibits, commercial	1629	Revetment construction—general contractors
8651	Republican clubs	1796	Revolving door installation—contractors
8922	Research agencies, scientific and educational: noncommercial	7219	Rewearing textiles (mending service)
7391	Research and development laboratories (not manufacturing auxiliaries)	7694	Rewinding stators
7391	Research and development of computer and related hardware	1381	Reworking oil and gas wells: on a contract basis
8922	Research institutes: Brookings, Carnegie, NBER, etc.	1099	Rhodium ore mining
7391	Research laboratories, commercial	1061	Rhodochrosite mining
7392	Research, except laboratory research (not manufacturing auxiliaries)	0182	Rhubarb grown under cover
7399	Reservation service, hotel	0723	Rice drying
1629	Reservoir construction—general contractors	0112	Rice farms
7041	Residence clubs, organization	5149	Rice, polished—wholesale
		5153	Rice, unpolished—wholesale
		7999	Riding academies and schools
		5699	Riding apparel stores—retail
		7997	Riding clubs, membership
		5941	Riding goods and equipment—retail
		7999	Riding stables

ALPHABETIC INDEX, NONMANUFACTURING INDUSTRIES

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1399 Rig building, repairing, and dismantling:
on a contract basis
 1429 Riprap quarrying, other than limestone
or granite
 4441 River transportation, other than on the
St. Lawrence Seaway
 5082 Road construction and maintenance ma-
chinery—wholesale
 1611 Road construction, except elevated—gen-
eral contractors
 4784 Roads, toll: operation of
 6251 Roasting chickens, raising of
 5999 Rock and stone specimens—retail
 1629 Rock removal, underwater—general con-
tractors
 1476 Rock salt mining
 5051 Rods, metal—wholesale
 7999 Roller skating rink operation
 1761 Roof spraying, painting, or coating—
contractors
 5211 Roofing material dealers—retail
 1761 Roofing work, including repairing—con-
tractors
 5099 Roofing, asphalt and sheet metal—whole-
sale
 7021 Rooming houses, except organization
 7041 Rooming houses, fraternity and sorority
 7041 Rooming houses, organization
 5085 Rope, except wire rope—wholesale
 5051 Rope, wire: not insulated—wholesale
 1094 Roscoelite (vanadium hydromica) min-
ing
 0181 Rose growers
 5161 Rosin—wholesale
 1521 Row house (single-family) construc-
tion—general contractors
 7999 Rowboat rental
 6792 Royalty companies, oil
 6281 Royalty owners protective associations
 1455 Rubber clay mining
 5085 Rubber goods, mechanical—wholesale
 5122 Rubber goods, medical—wholesale
 0849 Rubber plantations
 5093 Rubber scrap—wholesale
 5999 Rubber stamp stores—retail
 5199 Rubber, crude—wholesale
 1499 Rubbing stone quarrying
 4953 Rubbish collection and disposal
 1411 Rubble mining
 1499 Ruby mining
 7399 Rug binding for the trade
 7217 Rug cleaning, dyeing, and repairing
plants

7699 Rug repair shops, not combined with
cleaning
 5713 Rug stores—retail
 5023 Rugs—wholesale
 1389 Running, cutting, and pulling casings,
tubes and rods: oil and gas well
 1099 Ruthenium ore mining
 1099 Rutile mining
 0119 Rye farms

S

7699 Saddlery repair shops
 5941 Saddlery stores—retail
 6054 Safe deposit boxes
 4212 Safe moving
 7218 Safety glove supply service
 5063 Safety switches—wholesale
 0119 Safflower farms
 5041 Sailboats—wholesale
 6211 Sale of partnership shares in real estate
syndicates
 7392 Sales advisory service
 5999 Sales barns—retail
 5112 Sales books—wholesale
 7392 Sales promotion (not involving sales of
merchandise)
 1474 Salines (except common salt) mining
 0912 Salmon, catching of
 5813 Saloons (drinking places)
 1476 Salt (common) mining, rock
 1389 Salt water, impounding (in connection
with petroleum production)
 5145 Salted nuts—wholesale
 5161 Salts, industrial—wholesale
 5161 Salts, metal—wholesale
 7399 Salvaging of damaged merchandise, serv-
ice only
 4469 Salvaging of distressed vessels and their
cargoes
 4469 Salvaging, marine
 7319 Samples, distribution of
 7399 Sampling of commodities, not connected
with transportation
 5211 Sand and gravel dealers—retail
 5039 Sand—wholesale
 1799 Sandblasting of building exteriors—
contractors
 1429 Sandstone (except bituminous), crushed
and broken—quarrying
 1499 Sandstone, bituminous—quarrying
 1411 Sandstone, dimension—quarrying
 5812 Sandwich bars or shops—retail

STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|--|------|--|
| 5149 | Sandwiches—wholesale | 7699 | Scientific instrument (except electric) repair |
| 9631 | Sanitary districts—nonoperating | 5086 | Scientific instruments—wholesale |
| 9511 | Sanitary engineering agencies—government | 8621 | Scientific membership associations |
| 5074 | Sanitary ware, china or enameled iron—wholesale | 8922 | Scientific research agencies, noncommercial |
| 1499 | Sapphire mining | 1499 | Scoria mining |
| 5211 | Sash, storm: wood or metal—retail | 5093 | Scrap and junk, general line—wholesale |
| 5074 | Sauna heaters, except electric—wholesale | 7399 | Scrap steel cutting, on a contract basis |
| 5199 | Sausage casings—wholesale | 5093 | Scrap, iron and steel—wholesale |
| 6122 | Savings and loan associations, Federal | 5093 | Scrap, nonferrous metals—wholesale |
| 6123 | Savings and loan associations, State: insured | 5093 | Scrap, rubber—wholesale |
| 6124 | Savings and loan associations, State: not insured—members of FHLB | 5094 | Screening machinery and equipment—wholesale |
| 6125 | Savings and loan associations, State: not insured—not members of FHLB | 1499 | Screening peat |
| 6033 | Savings banks, mutual: insured—not members of Federal Reserve System | 1111 | Screening plants, anthracite |
| 6032 | Savings banks, mutual: members of Federal Reserve System | 1211 | Screening plants, bituminous coal |
| 6034 | Savings banks, mutual: not insured | 8999 | Sculptors' studios |
| 7699 | Saw sharpening and repair shops | 1499 | Scythestone quarrying |
| 1799 | Scaffolding construction—contractors | 0912 | Sea herring, catching of |
| 5082 | Scaffolding—wholesale | 0919 | Sea urchins, catching of |
| 7699 | Scale repair service | 5423 | Seafood markets—retail |
| 7299 | Scales, coin-operated: operation of | 5146 | Seafoods, not canned or frozen packaged—wholesale |
| 5081 | Scales, except laboratory—wholesale | 5085 | Seals, gaskets, and packing—wholesale |
| 7699 | Scaling, ship—contractors | 7299 | Seamstresses |
| 7299 | Scalp treatment service | 7011 | Seasonal hotels |
| 5093 | Scavenging—wholesale | 5018 | Seat belts—wholesale |
| 7922 | Scenery design, theatrical | 5013 | Seat covers—wholesale |
| 7922 | Scenery rental, theatrical | 0919 | Seaweed, gathering of |
| 7999 | Scenic railroads for amusement | 8211 | Secondary schools |
| 1061 | Scheelite mining | 5931 | Secondhand automotive accessory and parts dealers—retail |
| 1411 | Schist, dimension—quarrying | 5931 | Secondhand book stores—retail |
| 1542 | School building construction: general contractors | 5931 | Secondhand clothing and shoe stores—retail |
| 4151 | School buses | 5931 | Secondhand furniture stores—retail |
| 7221 | School photographers | 5931 | Secondhand tire dealers—retail |
| 5943 | School supplies—retail | 8244 | Secretarial schools, not of college grade |
| 5086 | School supplies—wholesale | 8211 | Sectarian schools (elementary and secondary) |
| 8211 | Schools for retarded | 9651 | Securities regulation commissions |
| 8211 | Schools for the physically handicapped (elementary and secondary) | 6211 | Security brokers |
| 8241 | Schools, correspondence: including branch offices and solicitors | 6211 | Security dealers |
| 7911 | Schools, dance: including children's, professionals' | 6231 | Security exchanges |
| 8211 | Schools, elementary and secondary | 6211 | Security flotation companies |
| 7999 | Schools, riding | 6231 | Security holders' protective committees |
| 8249 | Schools, vocational, except high schools, data processing, or business | 6799 | Security speculators for own account |
| | | 6211 | Security traders |
| | | 6211 | Security underwriters |
| | | 1499 | Sedge peat mining |
| | | 0711 | Seed bed preparation |
| | | 7397 | Seed testing laboratories |

ALPHABETIC INDEX, NONMANUFACTURING INDUSTRIES

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- 0721 Seeding crops, with/without fertilizing
 0721 Seeding of sprouts, twigs, etc.
 5261 Seeds, bulbs, nursery stock—retail
 0181 Seeds, flower and vegetable: growing of
 5191 Seeds: field, garden, and flower—whole-
 sale
 1382 Seismograph surveys: on a contract basis
 1492 Selenite mining
 8361 Self-help group homes for persons with
 social or personal problems
 8399 Self-help organizations: alcoholics and
 gamblers anonymous
 7215 Self-service laundry and dry cleaning
 6531 Selling agents for real estate
 5963 Selling organizations (headquarters of
 door-to-door canvassers)—retail
 1211 Semianthracite mining
 1211 Semibituminous coal mining
 8211 Seminaries, below university grade
 8221 Seminaries, theological
 1499 Semiprecious stones mining
 8399 Senior citizens associations
 7699 Septic tank cleaning service
 1711 Septic tank installation—contractors
 1429 Serpentine, crushed and broken—quarry-
 ing
 1411 Serpentine, dimension—quarrying
 8221 Service academies (college)
 1799 Service and repair of broadcasting sta-
 tions—contractors
 7374 Service bureaus, computer
 5963 Service entrance equipment, electrical—
 wholesale
 8321 Service leagues
 7299 Service machine operation, coin-operated
 7349 Service station cleaning and degreasing
 service
 1542 Service station construction: general
 contractors
 1799 Service station equipment installation,
 maintenance and repair—contractors
 5541 Service stations, gasoline—retail
 1381 Service well drilling: on a contract basis
 1389 Servicing oil and gas wells: on a con-
 tract basis
 1781 Servicing water wells—contractors
 8321 Settlement houses
 1623 Sewage collection and disposal line con-
 struction—general contractors
 1629 Sewage treatment plant construction—
 general contractors
 1623 Sewer (sanitary, storm, etc.) construc-
 tion—general contractors
 7699 Sewer cleaning and rodding
 445-987-72—27
 1711 Sewer hook-ups and connections for
 buildings—contractors
 5039 Sewer pipe, clay—wholesale
 4952 Sewerage systems
 5134 Sewing accessories—wholesale
 7699 Sewing machine repair shops
 5722 Sewing machine stores—retail
 5064 Sewing machines, household: electric—
 wholesale
 5084 Sewing machines, industrial—wholesale
 5134 Sewing thread, except industrial—whole-
 sale
 1112 Shaft sinking, anthracite mining: on a
 contract basis
 1213 Shaft sinking, bituminous coal and lignite
 mining: on a contract basis
 1081 Shaft sinking, metal mining: on a con-
 tract basis
 1481 Shaft sinking, nonmetallic minerals ex-
 cept fuels: on a contract basis
 1549 Shale (common) quarrying—not in con-
 junction with manufacturing
 7699 Sharpening and repairing knives, saws,
 and tools
 1499 Sharpening stone quarrying
 0751 Sheep dipping and shearing
 0214 Sheep feeding farms and ranches
 0214 Sheep raising farms and ranches
 5154 Sheep—wholesale
 1711 Sheet metal work combined with heating
 or air conditioning—contractors
 1761 Sheet metal work, except heating, or air
 conditioning—contractors
 5733 Sheet music stores—retail
 5199 Sheet music—wholesale
 1742 Sheetrock installation—contractors
 5051 Sheets, galvanized or other coated—
 wholesale
 5051 Sheets, metal—wholesale
 5023 Sheets, textile—wholesale
 5072 Shelf or light hardware—wholesale
 1499 Shell mining
 5198 Shellac—wholesale
 0913 Shellfish, catching of
 8331 Sheltered workshops
 9221 Sheriffs' offices
 4454 Shifting of floating equipment within
 harbors
 5039 Shingles, asbestos cement—wholesale
 5039 Shingles, asphalt—wholesale
 5031 Shingles, wood—wholesale
 7699 Ship boiler and tank cleaning and re-
 pair—contractors
 4469 Ship cleaning, except hold cleaning

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STANDARD INDUSTRIAL CLASSIFICATION

- 7361 Ship crew agencies
 4469 Ship dismantling
 4463 Ship hold cleaning
 1751 Ship joinery—contractors
 1721 Ship painting—contractors
 4469 Ship registers: survey and classification of ships and marine equipment
 7699 Ship scaling—contractors
 8611 Shipping and steamship company associations
 4712 Shipping documents preparation
 5113 Shipping supplies, paper (cartons, gummed tapes, etc.)—wholesale
 7213 Shirt supply service
 5699 Shirts, custom made—retail
 5136 Shirts, men's and boys'—wholesale
 5139 Shoe accessories—wholesale
 7399 Shoe designers
 7251 Shoe dyeing shops
 5087 Shoe heels—wholesale
 5084 Shoe manufacturing and repairing machinery—wholesale
 5087 Shoe repair materials—wholesale
 7251 Shoe repair shops
 7251 Shoe shine parlors
 5661 Shoe stores—retail
 5931 Shoe stores, secondhand—retail
 5139 Shoes—wholesale
 7997 Shooting clubs, membership
 7999 Shooting galleries
 1389 Shooting wells: on a contract basis
 1542 Shopping center construction: general contractors
 6512 Shopping centers, property operation only
 7319 Shopping news, advertising and distributing service
 7399 Shopping plates (charge account service)—collection by individual firms
 7299 Shopping service
 1799 Shoring and underpinning work—contractors
 1389 Shot-hole drilling service (oil field): on a contract basis
 5082 Shovels, power—wholesale
 7399 Show card painting
 0751 Showing of cattle, hogs, sheep, goats, and poultry
 0752 Showing of pets and other animal specialties
 1499 Shredding peat
 0913 Shrimp, catching of
 7399 Shrinking textiles for tailors and dress-makers
 0181 Shrubberies, except forest shrubbery: growing of
 6321 Sick benefit associations, mutual
 1011 Siderite mining
 1771 Sidewalk construction—contractors
 1761 Siding—contractors
 5639 Siding, sheet metal—wholesale
 1479 Sienna mining
 4521 Sightseeing airplane service
 4459 Sightseeing boats
 4119 Sightseeing buses
 7399 Sign painting and lettering shops
 5063 Signaling equipment, electrical—wholesale
 5099 Signs, except electric—wholesale
 1446 Silica mining
 1446 Silica sand mining
 0279 Silk (raw) production and silkworm farms
 5133 Silk piece goods, woven—wholesale
 7333 Silk screen design
 5199 Silk yarns—wholesale
 5159 Silk, raw—wholesale
 1459 Sillimanite mining
 1542 Silo construction, agricultural—general contractors
 1044 Silver ore mining
 5094 Silverware and plated ware—wholesale
 5944 Silverware—retail
 8641 Singing societies
 1521 Single-family home improvements: general contractors
 1112 Sinking shafts for anthracite mining: on a contract basis
 1213 Sinking shafts for bituminous coal and lignite mining: on a contract basis
 1061 Sinking shafts for metal mining: on a contract basis
 1011 Sintering of iron ore at the mine
 5145 Sirups, fountain—wholesale
 7392 Site locators
 7999 Skating instruction, ice or roller
 7999 Skating rink operation: ice or roller
 7999 Ski instruction
 7999 Ski lifts, cable lifts, ski tows: operated separately from lodges
 7011 Ski lodges and resorts
 7999 Ski rental concessions
 1629 Ski tow erection—general contractors
 5941 Skiing equipment—retail
 8331 Skill training centers
 5159 Skins, raw—wholesale
 5187 Skirts—wholesale
 7319 Sky writing

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- 1761 Skylight installation, metal—contractors
 1429 Slate, crushed and broken—quarrying
 1411 Slate, dimension—quarrying
 0751 Slaughtering, custom: for individuals
 4789 Sleeping car and other passenger car services, not performed by railroads
 7299 Slenderizing salons
 7333 Slide film producers
 1455 Slip clay mining
 5714 Slip cover stores—retail
 5023 Slip covers (furniture)—wholesale
 7999 Slot-car race tracks
 4619 Slurry pipe line operation
 1389 Slush pits and cellars, excavation of: on a contract basis
 9611 Small Business Administration
 9211 Small claims courts
 5084 Smelting machinery and equipment—wholesale
 1031 Smithsonite mining
 5199 Smokers' supplies—wholesale
 5194 Smoking tobacco—wholesale
 5812 Snack bars
 0161 Snap bean farms (bush and pole)
 5599 Snowmobiles—retail
 4959 Snowplowing
 5194 Snuff—wholesale
 5161 Soap, chips, and powder: laundry—wholesale
 5122 Soap, toilet—wholesale
 1496 Soapstone quarrying
 7941 Soccer clubs
 8399 Social change associations: Urban Coalition, Urban League, etc.
 8641 Social clubs, membership
 7299 Social escort service
 8922 Social research, noncommercial
 9441 Social security administration
 8321 Social service centers: Salvation Army, etc.
 8399 Social service information exchanges: alcoholism, drug addiction, etc.
 0181 Sod farms
 1474 Soda ash (natural) mining
 5081 Soda fountain fixtures—wholesale
 5812 Soda fountains
 1474 Sodium compounds, natural (except common salt) mining
 5812 Soft drink stands—retail
 5149 Soft drinks—wholesale
 7372 Software services, computer
 1629 Soil compacting service—general contractors
 9512 Soil conservation services
 5087 Soles, shoe—wholesale
 7399 Solvents recovery service, on a contract basis
 8999 Song writers
 0119 Sorghum (except for sirup) farms
 8641 Sororities
 7041 Sorority residential houses
 0723 Sorting, grading, and packing of fruits and vegetables
 1731 Sound equipment installation—contractors
 5065 Sound equipment, electronic: except household—wholesale
 5142 Soup, frozen—wholesale
 5947 Souvenir shops—retail
 0116 Soybean farms
 0849 Spanish moss, gathering of
 7299 Spas, health: except resort with lodging
 7399 Speakers' bureaus
 1531 Speculative builders
 8081 Speech defect clinics
 5531 Speed shops—retail
 7948 Speedway operation
 0849 Sphagnum moss, gathering of
 1081 Sphalerite mining
 5499 Spice and herb stores—retail
 5149 Spices—wholesale
 5182 Spirits—wholesale
 1479 Spodumene mining
 0919 Sponges, gathering of
 7399 Sponging textiles for tailors and dress-makers
 7032 Sporting camps
 7999 Sporting goods rental
 5941 Sporting goods stores—retail
 5041 Sporting goods, including firearms, ammunition, and bicycles—wholesale
 7997 Sports and recreation clubs, membership
 5699 Sports apparel stores—retail
 7941 Sports field operation (sports promotion)
 7999 Sports instructors, professional: for golf, skiing, swimming, etc.
 7999 Sports professionals
 7941 Sports promotion, professional: baseball, football, boxing, etc.
 5136 Sportswear, men's and boys'—wholesale
 5137 Sportswear: women's and children's—wholesale
 0721 Spraying crops, with/without fertilizing
 0711 Spreading lime
 5087 Sprinkler systems—wholesale
 1711 Sprinkler system installation—contractors
 5085 Sprockets—wholesale

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STANDARD INDUSTRIAL CLASSIFICATION

- 0849 Spruce gum, gathering of
 1881 "Spudding in" oil and gas wells: on a contract basis
 0161 Squash farms
 7948 Stables, racing
 7999 Stables, riding
 5084 Stackers, industrial—wholesale
 7941 Stadiums (sports promotion)
 8999 Stained glass artists
 5999 Stamps (philatelist)—retail, except mail order
 5961 Stamps, mail order—retail
 5072 Staples—wholesale
 4212 Star routes
 0252 Started pullet farms
 7539 Starter and generator repair, automotive
 6123 State annuity savings institutions, insured
 6124 State annuity savings institutions, not insured: members of FHLB
 6125 State annuity savings institutions, not insured: not members of FHLB
 6023 State banks (except mutual savings), insured: not members of Federal Reserve System
 6022 State banks (except mutual savings), members of Federal Reserve System
 6024 State banks (except mutual savings), not insured: not members of Federal Reserve System
 6143 State credit unions
 9721 State department
 9411 State education departments
 9221 State highway patrols
 6033 State mutual savings banks, insured: not members of Federal Reserve System
 6032 State mutual savings banks, members of Federal Reserve System
 6034 State mutual savings banks, not insured
 6042 State nondeposit trust companies, members Federal Reserve System, insured or not insured
 6044 State nondeposit trust companies, not insured
 9221 State police
 6123 State savings and loan associations, insured
 6124 State savings and loan associations, not insured: members of FHLB
 6125 State savings and loan associations, not insured: not members of FHLB
 9811 State tax commissions
 9651 State watchmakers' board
 5112 Stationery and stationery supplies—wholesale
 5943 Stationery stores—retail
 5143 Stations, cream—wholesale
 4013 Stations, operated by railway terminal companies
 5081 Statistical machines—wholesale
 7299 Steam baths
 1799 Steam cleaning of building exteriors—contractors
 1711 Steam fitting—contractors
 5074 Steam fittings—wholesale
 4961 Steam heating systems (suppliers of heat)
 4961 Steam supply systems, including geothermal
 4469 Steamship leasing
 4722 Steamship ticket offices, not operated by transportation companies
 1496 Steatite mining
 1799 Steel work, ornamental—contractors
 1791 Steel work, structural—contractors
 5051 Steel—wholesale
 1799 Steeple jacks
 7339 Stenographers, public
 7339 Stenographic service
 7622 Stereophonic equipment repair
 4463 Stevedoring
 7339 Still and slide film producers
 7299 Stitching, on a custom basis
 6321 Stock accident and health insurance
 6211 Stock brokers and dealers
 7948 Stock car racing
 7922 Stock companies, theatrical
 6231 Stock exchanges
 6331 Stock fire, marine, and casualty insurance
 6311 Stock life insurance
 6023 Stock savings banks, State: insured—not members of Federal Reserve System
 6022 Stock savings banks, State: members of Federal Reserve System
 6024 Stock savings banks, State: not insured—not members of Federal Reserve System
 4899 Stock ticker service
 6231 Stock transfer agents
 0211 Stockyards, exclusively for fattening cattle
 4789 Stockyards, not primarily for fattening or selling livestock
 1741 Stone setting—contractors
 5039 Stone, building—wholesale
 5039 Stone, crushed—wholesale

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- 5999 Stones, crystalline: rough—retail
 1453 Stoneware clay mining
 1741 Stonework erection—contractors
 7525 Storage (live) garages, automobile
 7219 Storage and repair of fur and other garments
 5063 Storage batteries, industrial—wholesale
 4226 Storage of goods at foreign trade zones
 4224 Storage of household goods, without local trucking
 4214 Storage of household goods: combined with local trucking
 4922 Storage of natural gas
 4221 Storage other than cold storage, farm product
 1791 Storage tanks, metal: erection—contractors
 4224 Storage, furniture: without local trucking
 4225 Storage, general
 4226 Storage, special: except farm product, cold storage, and household goods
 1542 Store construction and alteration—general contractors
 5061 Store equipment, except furniture—wholesale
 5931 Store fixture and equipment stores, secondhand—retail
 1751 Store fixture installation—contractors
 5061 Store fixtures—wholesale
 1791 Store front installation, metal—contractors
 5061 Store machines—wholesale
 5211 Storm windows and sash, wood or metal—retail
 7699 Stove repair shops
 5722 Stoves and related electric and gas appliances—retail
 5074 Stoves, cooking: except electric—wholesale
 5064 Stoves, cooking or heating, household: electric—wholesale
 5191 Straw—wholesale
 0171 Strawberry farms
 1611 Street maintenance or repair—general contractors
 1611 Street paving—general contractors
 4111 Street railway operation
 4953 Street refuse systems
 1111 Strip mining, anthracite: except on a contract basis
 1112 Strip mining, anthracite: on a contract basis
 1211 Strip mining, bituminous coal: except on a contract basis
 1213 Strip mining, bituminous coal: on a contract basis
 1081 Strip mining, metal: on a contract basis
 1481 Strip mining, nonmetallic minerals except fuels: on a contract basis
 5051 Strip, metal—wholesale
 1213 Stripping services, bituminous coal and lignite: on a contract basis
 1479 Strontianite mining
 1479 Strontium mineral mining
 5039 Structural assemblies, prefabricated: nonwood—wholesale
 5031 Structural assemblies, prefabricated: wood—wholesale
 5211 Structural clay products—retail
 5051 Structural shapes, iron and steel—wholesale
 1791 Structural steel erection—contractors
 1771 Stucco construction—contractors
 5039 Stucco—wholesale
 7819 Studio property rental for motion picture film production
 7911 Studios, dance
 7221 Studios, portrait photography
 7399 Styling of fashions, apparel, furniture, textiles, etc.
 7399 Styling wigs for the trade
 1211 Subbituminous coal mining
 1629 Submarine rock removal—general contractors
 4833 Subscription or closed circuit television
 4111 Suburban and urban railway operation
 1629 Subway construction—general contractors
 4111 Subway operation
 0133 Sugar beet farms
 5159 Sugar, raw—wholesale
 5149 Sugar, refined—wholesale
 0133 Sugarcane farms
 0722 Sugarcane, machine harvesting of
 5136 Suits, men's and boys'—wholesale
 5137 Suits: women's, children's and infants'—wholesale
 1477 Sulfur (native) mining
 1477 Sulfur, ground or otherwise treated
 7011 Summer resort hotels
 1711 Sump pump installation and servicing—contractors
 9211 Superior courts
 9199 Supply agencies—government
 9211 Supreme courts
 6351 Surety insurance

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STANDARD INDUSTRIAL CLASSIFICATION

		T
1771	Surfacing concrete floors—contractors	7218 Table cover supply service
8011	Surgeons, offices of	5023 Table linens—wholesale
0721	Surgery on orchard trees and vines	7374 Tabulating service
5086	Surgical equipment and supplies—wholesale	5072 Tacks—wholesale
7699	Surgical instrument repair	1011 Taconite mining
9211	Surrogates' courts	7219 Tailor shops, except custom or merchant tailors
7699	Surveying instrument repair	5699 Tailors, custom—retail
1399	Surveying wells: on a contract basis	5067 Tailors' supplies—wholesale
8911	Surveying: land, water, and aerial	1496 Talc mining
4469	Surveyors, marine: except cargo	0174 Tangerine groves and farms
4782	Surveyors, marine cargo	7699 Tank and boiler cleaning service
7392	Surveys, for location of business establishments	7699 Tank cleaning, ship
1399	Swabbing wells: on a contract basis	7699 Tank truck cleaning service
4959	Sweeping service: road, airport, parking lot, etc.	**** Tanker fleets of oil companies, if separate—code in transportation
0161	Sweet corn farms	1061 Tantalite mining
0161	Sweet pepper farms	1061 Tantalum ore mining
0723	Sweet potato curling	5813 Tap rooms (drinking places)
0139	Sweet potato farms	7824 Tape distribution for TV
7997	Swimming clubs, membership	7379 Tape recertification service
7999	Swimming instruction	7622 Tape recorder repair
7399	Swimming pool cleaning and maintenance	5732 Tape recorders—retail
1799	Swimming pool construction—contractors	7399 Tape slitting for the trade (cutting plastic, leather, etc., into widths)
7999	Swimming pools	5124 Tape, textile—wholesale
5999	Swimming pools, home: not installed	1742 Taping and bedding, plasterboard—contractors
7399	Switchboard operation of private branch exchanges	5084 Tapping attachments—wholesale
5063	Switchboards—wholesale	7299 Tattoo parlors
5063	Switches, safety—wholesale	5813 Taverns (drinking places)
1423	Syenite (except nepheline), crushed and broken—quarrying	9311 Tax (property) assessors' offices
1411	Syenite (except nepheline), dimension—quarrying	6211 Tax certificate dealers
1459	Syenite, nepheline—quarrying	6059 Tax certificate sale and redemption agencies
1041	Sylvanite mining	7399 Tax collection agencies: collecting for a city, county, or State
7929	Symphony orchestras	6799 Tax liens: holding, and buying and selling
7351	Syndicates, news	7299 Tax return preparation service
7372	Systems analysis and design, computer software	7399 Tax title dealers: agencies for city, county, or State
7392	Systems analysis or design, not primarily computer related	9311 Taxation departments
7372	Systems engineering, computer related	4121 Taxicab operation
7392	Systems engineering, not primarily computer related	5012 Taxicabs—wholesale
7372	Systems research and development, computer related	7699 Taxidermists
7392	Systems research and development, not primarily computer related	8641 Taxpayers' associations
		5812 Tea rooms
		5499 Tea stores—retail
		5149 Tea—wholesale
		0649 Teaberries, gathering of

ALPHABETIC INDEX, NONMANUFACTURING INDUSTRIES

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- 9411 Teacher certification bureaus
- 7361 Teachers' agencies
- 5081 Teaching machines, electronic—whole-sale
- 8222 Technical institutes
- 5621 Teenage apparel shops—retail
- 8072 Teeth, artificial—made in dental laboratories to order for the profession
- 4899 Telecommunication, except telephone, telegraph, radio, videophone, and TV
- 4821 Telegraph cable service, land or submarine
- 1623 Telegraph line construction—general contractors
- 7399 Telegraph service, florist
- 4821 Telegraph, wire and radio
- 7349 Telephone booths, cleaning and maintenance of
- 4811 Telephone cable service, land or submarine
- 1731 Telephone installation—contractors
- 1623 Telephone line construction—general contractors
- 7399 Telephone message service
- 7399 Telephone solicitation service
- 4811 Telephone, wire or radio
- 4899 Telephoto service, leasing
- 5999 Telescopes—retail
- 4899 Teletypewriter service, leasing
- 1799 Television and radio stations, service and repair of—contractors
- 7313 Television and radio time, sale of
- 1623 Television and radio transmitting tower construction—general contractors
- 4899 Television antenna construction and rental to private households
- 4833 Television broadcasting stations
- 7922 Television employment agencies
- 7814 Television film production
- 7922 Television program, including commercials, producers
- 5065 Television receiving and transmitting tubes—wholesale
- 7622 Television repair shops
- 5732 Television set stores—retail
- 5064 Television sets—wholesale
- 4833 Television translator stations
- 4833 Television, subscription or closed circuit
- 1041 Telluride (gold) mining
- 7362 Temporary help service
- 7933 Ten pin alleys
- 7997 Tennis clubs, membership
- 7999 Tennis clubs, nonmembership
- 1611 Tennis court construction (outdoor)—general contractors
- 7999 Tennis courts, outdoor and indoor: operation of—nonmembership
- 5941 Tennis goods and equipment—retail
- 7999 Tennis professionals
- 7699 Tent repair shops
- 5999 Tent shops—retail
- 4013 Terminal and switching companies, railroad
- 4463 Terminal operation, waterfront
- 4583 Terminal services, coordinated: at airports
- 4231 Terminals, freight trucking: with or without maintenance facilities
- 7342 Termite control
- 5051 Terneplate—wholesale
- 5039 Terra cotta—wholesale
- 0919 Terrapins, catching of
- 1743 Terrazzo work—contractors
- 9211 Territorial courts
- 1799 Test boring for construction—contractors
- 1081 Test drilling for metal mining: on a contract basis
- 1481 Test drilling for nonmetallic minerals except fuels: on a contract basis
- 5063 Testing and measuring equipment, electrical: except automotive—wholesale
- 5013 Testing equipment, electrical: automotive—wholesale
- 7397 Testing laboratories (physical or product testing)
- 7392 Testing service, educational or personnel
- 5133 Textile converters except knit goods—wholesale
- 7399 Textile cutting service
- 7399 Textile designers
- 7399 Textile folding and packing services
- 5084 Textile machinery and equipment—wholesale
- 5085 Textile printers' supplies—wholesale
- 7699 Textile roll covering service
- 4226 Textile warehousing
- 5093 Textile waste—wholesale
- 7399 Textiles, sponging or shrinking: for tailors and dressmakers
- 5133 Textiles, woven—wholesale
- 6512 Theater buildings: (ownership and operation)
- 5999 Theater programs—retail
- 7833 Theaters, motion picture, drive-in
- 7832 Theaters, motion picture, except drive-in
- 7922 Theatrical booking agencies, except motion picture
- 7829 Theatrical booking agencies: motion picture

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STANDARD INDUSTRIAL CLASSIFICATION

7922	Theatrical companies, amateur	7534	Tire repair shops
7922	Theatrical employment agencies	5014	Tires and tubes—wholesale
7922	Theatrical equipment rental	5014	Tires, used—wholesale
7922	Theatrical lighting, on a contract basis	1099	Titaniferous-magnetite mining, valued chiefly for titanium content
7922	Theatrical production, except motion picture	1099	Titanium ore mining
7922	Theatrical ticket agencies	6541	Title abstract companies
7996	Theme parks (amusement)	6541	Title and trust companies
8221	Theological seminaries	6361	Title insurance
7699	Thermostat repair	6541	Title reconveyance companies
0721	Thinning of crops, mechanical and chemical	6541	Title search companies
1099	Thorium ore mining	7819	Titling of motion picture film
5134	Thread, sewing, except industrial—wholesale	5064	Toasters, electric—wholesale
0722	Thrashing service	5159	Tobacco (leaf) exporters—wholesale
4899	Ticker tape service, leasing	5159	Tobacco auctioning and warehousing—wholesale
7922	Ticket agencies, theatrical	0132	Tobacco farms
4722	Ticket offices, transportation: not operated by transportation companies	0723	Tobacco grading
7999	Ticket sales offices for sporting events, contract	5194	Tobacco products, manufactured—wholesale
5611	Tie shops—retail	7599	Tobacco sheeting service on a contract or fee basis
5211	Tile and brick dealers—retail	4221	Tobacco warehousing and storage
1752	Tile installation, asphalt—contractors	5194	Tobacco, except leaf—wholesale
1743	Tile installation, ceramic—contractors	5159	Tobacco, leaf—wholesale
1743	Tile setting, ceramic—contractors	5993	Tobacconists—retail
5039	Tile—wholesale	7394	Toilet (portable) rental
5099	Timber products, rough—wholesale	5122	Toilet articles—wholesale
1629	Timber removal underwater—general contractors	5122	Toilet preparations—wholesale
0811	Timber tracts	5122	Toilet soap—wholesale
0851	Timber valuation	5122	Toiletries—wholesale
7374	Time sharing, computer	4784	Toll bridge operation
5063	Time switches—wholesale	4784	Toll roads, operation of
0139	Timothy farms	0161	Tomato farms
5051	Tin and tin base metals, shapes, forms, etc.—wholesale	0182	Tomatoes grown under cover
1099	Tin ore mining	5999	Tombstones—retail
5051	Tin plate bars—wholesale	7399	Tool designers
5051	Tin plate—wholesale	7394	Tool rental
1761	Tinsmithing, in connection with construction work—contractors	7699	Tool sharpening and repair shops
7699	Tinsmithing, repair work only: other than construction	5013	Tools and equipment, automotive—wholesale
1799	Tinting glass—contractors	5072	Tools, hand: except automotive and machinists' precision—wholesale
5719	Tinware stores—retail	5084	Tools, machinists' precision—wholesale
1629	Tipple construction—general contractors	5251	Tools, power and hand—retail
5531	Tire (automobile) dealers—retail	5064	Toothbrushes, electric—wholesale
5931	Tire (automobile) dealers, secondhand—retail	5122	Toothbrushes, except electric—wholesale
5014	Tire and tube repair materials—wholesale	7531	Top repair, automotive
7534	Tire recapping	1459	Topaz (nongem) mining
		5159	Tops, wool—wholesale
		4722	Tourist agencies for the arrangement of transportation
		7999	Tourist attractions, natural wonder: commercial

ALPHABETIC INDEX, NONMANUFACTURING INDUSTRIES

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- | | |
|---|---|
| 7011 Tourist cabins | 8361 Training schools for delinquents |
| 7011 Tourist camps | 7999 Trampoline operation |
| 7011 Tourist courts | 4119 Tramways, aerial: except amusement and scenic |
| 7999 Tourist guides | 5063 Transformers, electric—wholesale |
| 4722 Tours, conducted: except sightseeing buses, boats, and airplanes | 7221 Transient photographers |
| 7523 Tow-in parking lots | 7819 Transit advertising |
| 7213 Towel supply service | 9621 Transit systems and authorities, non-operating |
| 5113 Towels, paper—wholesale | 7399 Translation services |
| 7549 Towing service, automotive | 4923 Transmission and distribution of natural gas |
| 4454 Towing, marine | 5063 Transmission equipment, electrical—wholesale |
| 9211 Town courts | 1623 Transmission line construction—general contractors |
| 1521 Town house construction—general contractors | 4911 Transmission of electric power |
| 5945 Toy and game stores—retail | 4922 Transmission of natural gas |
| 5042 Toys—wholesale | 7539 Transmission repair, automotive |
| 5051 Track spikes—wholesale | 4723 Transport clearinghouse |
| 4899 Tracking missiles by telemetry and photography on a contract basis | 4723 Transportation brokerage |
| 5082 Tractor mounted equipment—wholesale | 9621 Transportation departments—government |
| 7699 Tractor repair | 5088 Transportation equipment and supplies, except motor vehicles—wholesale |
| 5083 Tractors, agricultural—wholesale | 4441 Transportation on bays and sounds of the ocean |
| 5084 Tractors, industrial—wholesale | 4441 Transportation on canals |
| 5012 Tractors, truck—wholesale | 4441 Transportation on rivers, other than on the St. Lawrence Seaway |
| 8611 Trade associations | 4723 Transportation rate services |
| 9611 Trade commissions | 4511 Transportation, air: by certificated carriers |
| 8249 Trade schools | 4521 Transportation, air: by noncertificated carriers |
| 8631 Trade unions, local or national | 4422 Transportation, coastwise |
| 6221 Traders, commodity contract | 4411 Transportation, deep sea: foreign |
| 6211 Traders, security | 4431 Transportation, Great Lakes and St. Lawrence Seaway |
| 6793 Trading companies, commodity | 4423 Transportation, intercoastal |
| 7396 Trading stamp promotion and sale to stores | 4011 Transportation, railroad: line-haul |
| 7396 Trading stamps, redemption of | 4421 Transportation, water: to noncontiguous territories |
| 7392 Traffic consultants | 4899 Transradio press service |
| 9211 Traffic courts | 1429 Trap rock, crushed and broken—quarrying |
| 1721 Traffic lane painting—contractors | 1411 Trap rock, dimension—quarrying |
| 1611 Trail building—general contractors | 0971 Trapping carried on as a business enterprise |
| 1611 Trailer camp construction—general contractors | 4722 Travel agencies and bureaus not operated by transportation companies |
| 7519 Trailer rental | 5561 Travel trailers: automobile, new and used—retail |
| 7033 Trailering parks and camp sites for transients | 8321 Traveler's Aid centers |
| 5012 Trailers for passenger automobiles—wholesale | |
| 5012 Trailers for trucks, new and used—wholesale | |
| 5084 Trailers, industrial—wholesale | |
| 0759 Training horses (including race horses) | |
| 7813 Training motion picture production, except for TV | |
| 0752 Training of pets and other animal specialties | |

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STANDARD INDUSTRIAL CLASSIFICATION

6059	Travelers' check issuance	6026	Trust companies (with deposits), national: insured—not members of Federal Reserve System
1422	Travertine, crushed and broken—quarrying	6025	Trust companies (with deposits), national: members of Federal Reserve System
1411	Travertine, dimension—quarrying	6027	Trust companies (with deposits), national: not insured
9311	Treasurers' offices—government	6023	Trust companies (with deposits), State: insured—not members of Federal Reserve System
7218	Treated mats, rugs, mops, dust tool covers, and cloths supply service	6022	Trust companies (with deposits), State: members of Federal Reserve System
0811	Tree farms	6024	Trust companies (with deposits), State: not members of Federal Reserve System
0173	Tree nut groves and farms	6042	Trust companies, nondeposit: State—members of Federal Reserve System
0723	Tree nut hulling and shelling	6044	Trust companies, nondeposit: State—not insured
0722	Tree nuts, machine harvesting of	6153	Trust deeds, purchase and sale of
6821	Tree seed gathering, extracting, and selling	6733	Trustees, except for educational, religious, or charitable trusts
0783	Tree trimming for public utility lines	6733	Trusts except educational, religious, and charitable: management of
0783	Trees, ornamental: planting, pruning, bracing, spraying, and surgery	6732	Trusts, charitable: management of
1629	Trenching—general contractors	6732	Trusts, educational: management of
1622	Trestle construction—general contractors	6733	Trusts, personal investment: management of
5031	Trim, sheet metal—wholesale	6732	Trusts, religious: management of
1499	Tripoli mining	8069	Tuberculosis hospitals
4111	Trolley coach operation	5065	Tubes electronic: receiving and transmitting, and industrial—wholesale
1474	Trona mining	5051	Tubing, metal—wholesale
5999	Trophy shops—retail	1741	Tuck pointing—contractors
0179	Tropical fruit farms	4454	Tugboat service
5186	Trousers, men's and boys'—wholesale	0912	Tuna, catching of
0279	Trout farms	0173	Tung nut groves and farms
1541	Truck and automobile assembly plant construction: general contractors	1061	Tungsten ore mining
7533	Truck engine repair	7699	Tuning of pianos and organs
0161	Truck farms	1622	Tunnel (vehicular, pedestrian, etc.) construction—general contractors
6159	Truck finance leasing	4784	Tunnel operation, vehicular
7513	Truck leasing, without drivers: except finance (equity) leasing	1112	Tunneling, anthracite mine: on a contract basis
4312	Truck rental, with drivers	1213	Tunneling, bituminous coal and lignite mining: on a contract basis
7513	Truck rental, without drivers	0253	Turkey egg farms and ranches
7212	Truck route laundry and dry cleaning, not operated by laundry or cleaners	0253	Turkey farms and ranches
5541	Truck stops	7299	Turkish baths
5014	Truck tires and tubes—wholesale	5161	Turpentine—wholesale
5012	Truck tractors—wholesale	1499	Turquoise mining
5012	Truck trailers—wholesale	0919	Turtles, catching of
4723	Truck transportation brokers		
4212	Trucking logs		
4331	Trucking terminals, freight: with or without maintenance facilities		
4212	Trucking timber		
4213	Trucking, except local		
4214	Trucking, local: combined with storage		
4212	Trucking, local: without storage		
5012	Trucks—wholesale		
5084	Trucks, industrial—wholesale		
5948	Trunks (luggage)—retail		

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8299 Tutoring schools
 7819 TV tape services: editing, transfers, etc.
 5085 Twine—wholesale
 1522 Two-or-more family house construction:
 general contractors
 7699 Typewriter repair, including electric
 5999 Typewriter stores—retail
 5081 Typewriters—wholesale
 7339 Typing service

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9222 U.S. attorneys' offices
 9721 U.S. Information Service
 4311 U.S. Postal Service
 1474 Ulexite mining
 1479 Umber mining
 7699 Umbrella repair shops
 5699 Umbrella stores—retail
 7549 Undercoating cars
 1799 Underpinning work—contractors
 7261 Undertakers
 5087 Undertakers' equipment and supplies—
 wholesale
 5136 Underwear, men's and boys'—wholesale
 5137 Underwear: women's, children's and in-
 fants'—wholesale
 6211 Underwriters, security
 4454 Undocking of ocean vessels
 9441 Unemployment insurance offices
 5699 Uniforms—retail
 6023 Unincorporated (private) banks, insured
 6028 Unincorporated private banks, not in-
 sured
 6371 Union trust funds
 6371 Union welfare, benefit, and health funds
 6724 Unit investment trusts
 5063 Unit substations—wholesale
 8399 United fund councils
 8399 United Givers Funds
 8221 Universities
 8641 University clubs
 4463 Unloading vessels
 5087 Upholsterers' equipment and supplies, ex-
 cept fabrics—wholesale
 7217 Upholstery cleaning on customers' prem-
 ises
 5133 Upholstery fabrics, woven—wholesale
 5714 Upholstery materials stores—retail
 7581 Upholstery repair, automotive
 1094 Uraninite (pitchblende) mining
 1094 Uranium ore mining
 4111 Urban and suburban railway operation
 6162 Urban mortgage companies

9532 Urban planning commissions
 9532 Urban renewal agencies
 7362 Usher service
 0788 Utility line tree trimming service
 7519 Utility trailer rental
 5561 Utility trailers—retail

V

6733 Vacation funds for employees
 0751 Vaccinating livestock except animal spe-
 cialties, except by veterinarians
 0752 Vaccinating pets and other animal spe-
 cialties, except by veterinarians
 5722 Vacuum cleaner stores—retail
 5064 Vacuum cleaners, household—wholesale
 5087 Vacuum cleaning systems—wholesale
 1796 Vacuum cleaning systems, built-in—
 contractors
 4959 Vacuuming of airport runways
 7299 Valet parking
 7212 Valet service
 5085 Valves and fittings, except plumbers'—
 wholesale
 5074 Valves, plumbers'—wholesale
 1094 Vanadium ore mining
 5331 Variety stores, limited price—retail
 5198 Varnishes—wholesale
 7922 Vaudeville companies
 5081 Vaults and safes—wholesale
 5431 Vegetable and fruit stands—retail
 0723 Vegetable drying
 0161 Vegetable farms
 5431 Vegetable markets—retail
 4742 Vegetable precooling, in connection with
 railroad transportation
 0723 Vegetable precooling, not in connection
 with transportation
 0723 Vegetable sorting, grading, and packing
 0182 Vegetables grown under cover
 5148 Vegetables, fresh—wholesale
 5042 Vehicles, children's—wholesale
 5962 Vending machine sale of products
 5081 Vending machines (selling of ma-
 chines)—wholesale
 7394 Vending machines, rental only
 5031 Veneer—wholesale
 7349 Venetian blind cleaning, including work
 done on owner's premises
 7699 Venetian blind repair shops
 5719 Venetian blind shops—retail
 5075 Ventilating equipment and supplies—
 wholesale
 1711 Ventilating work, with or without sheet
 metal work—contractors

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STANDARD INDUSTRIAL CLASSIFICATION

4742	Ventilation of railroad cars	5231	Wallpaper stores—retail
1429	Verde antique, crushed and broken—quarrying	5198	Wallpaper—wholesale
1411	Verde antique, dimension—quarrying	1741	Walls, retaining—contractors
1499	Vermiculite mining	0173	Walnut groves and farms
4469	Vessels, distressed: salvaging of	0723	Walnut hulling and shelling
9451	Veterans' affairs offices	7819	Wardrobe rental for motion picture film production
8641	Veterans' organizations	7299	Wardrobe service, except theatrical
0741	Veterinarians for livestock, except animal specialties	1541	Warehouse construction—general contractors
0742	Veterinarians for pets and other animal specialties	4221	Warehousing and storage, farm product: other than refrigerated
5086	Veterinarians' equipment and supplies—wholesale	4224	Warehousing of household goods, without local trucking
0741	Veterinary services for livestock, except animal specialties	4222	Warehousing, cold storage or refrigerated
0742	Veterinary services for pets and other animal specialties	4225	Warehousing, general
1622	Viaduct construction—general contractors	4226	Warehousing, special: except cold storage, farm, and household goods
7814	Video tape production (but not reproducing)	1629	Washeries (mining) construction—general contractors
0762	Vineyard management and maintenance, with or without crop services	1111	Washeries, anthracite
0172	Vineyards	1211	Washeries, bituminous coal
1752	Vinyl tile and sheet installation—contractors	7542	Washing and polishing, automotive
8091	Visiting nurse associations	7629	Washing machine repair
5499	Vitamin food stores—retail	5064	Washing machines, household: electric—wholesale
5122	Vitamins—wholesale	7342	Washroom sanitation service
8299	Vocational counseling, except rehabilitation counseling	5093	Waste bottles and boxes—wholesale
8211	Vocational high schools	1629	Waste disposal plant construction—general contractors
8331	Vocational rehabilitation agencies	9511	Waste management program administration
8331	Vocational rehabilitation counseling	4953	Waste materials, disposal at sea
8249	Vocational schools, except high schools, data processing or business	5093	Waste paper—wholesale
8331	Vocational training agencies, except schools	5093	Waste rags—wholesale
1499	Volcanic ash mining	5093	Waste, rubber—wholesale
1429	Volcanic rock, crushed and broken—quarrying	5093	Waste, textile—wholesale
1411	Volcanic rock, dimension—quarrying	7631	Watch repair shops
5087	Voting machines—wholesale	5094	Watches and parts—wholesale
7534	Vulcanizing tires and tubes (repair service)	5944	Watches, including custom made—retail
		7393	Watching service, private
		5074	Water conditioning equipment—wholesale
		9511	Water control and quality agencies
		5078	Water coolers, drinking: mechanical—wholesale
		4971	Water distribution or supply systems for irrigation
5064	Waffle irons, electric—wholesale	5064	Water heaters, electric—wholesale
9651	Wage control agencies	5074	Water heaters, except electric—wholesale
5963	Wagons, ice cream—retail	1381	Water intake well drilling: on a contract basis
5211	Wallboard (composition) dealers—retail	1623	Water main construction—general contractors
5031	Wallboard—wholesale		
1799	Wallpaper removal—contractors		

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|------|---|------|---|
| 9511 | Water pollution control agencies | 1389 | Well pumping, oil and gas: on a contract basis |
| 1629 | Water power project construction—general contractors | 1389 | Well servicing, oil and gas wells: on a contract basis |
| 1711 | Water pump installation and servicing—contractors | 0919 | Whale fishing |
| 5084 | Water pumps—wholesale | 0919 | Whale meat production |
| 7399 | Water softener service | 0919 | Whale oil production, crude |
| 1623 | Water supply lines construction—general contractors | 1629 | Wharf construction—general contractors |
| 4941 | Water supply systems, except irrigation | 0111 | Wheat farms |
| 4459 | Water taxis, operation of | 5153 | Wheat—wholesale |
| 4421 | Water transportation to noncontiguous territories | 7539 | Wheel alignment, automotive |
| 1629 | Water treatment plant construction—general contractors | 5013 | Wheels, motor vehicle—wholesale |
| 1781 | Water well drilling—contractors | 1499 | Whetstone quarrying |
| 5499 | Water, mineral—retail | 4226 | Whisky warehousing |
| 4463 | Waterfront terminal operation | 1721 | Whitewashing—contractors |
| 0161 | Watermelon farms | 1422 | Whiting mining, crushed and broken—quarrying |
| 1799 | Waterproofing—contractors | 5699 | Wig, toupee, and wiglet stores (including custom made)—retail |
| 1629 | Waterway construction—general contractors | 5199 | Wigs—wholesale |
| 7999 | Wax figure exhibitions | 9512 | Wildlife conservation agencies—government |
| 7999 | Wax museums, commercial | 0971 | Wildlife management |
| 8999 | Weather forecasters | 1031 | Willemite mining |
| 8999 | Weather modification (rain makers) | 5084 | Winches—wholesale |
| 1799 | Weather stripping—contractors | 9512 | Wind and water erosion control agencies |
| 7219 | Weaving textiles (mending service) | 5083 | Wind machines (frost protection equipment)—wholesale |
| 7299 | Wedding chapels, privately operated | 1751 | Window and door (prefabricated) installation—contractors |
| 0721 | Weed control, after planting | 7341 | Window cleaning service |
| 0711 | Weed control, before planting | 5031 | Window frames, sheet metal—wholesale |
| 7399 | Weighing foods and other commodities, not connected with transportation | 5039 | Window glass—wholesale |
| 4782 | Weighing services connected with transportation | 1799 | Window shade installation—contractors |
| 7399 | Welcome wagon service | 7699 | Window shade repair shops |
| 1799 | Welding contractors, operating at site of construction | 5719 | Window shade shops—retail |
| 5084 | Welding machinery and equipment—wholesale | 7399 | Window trimming service |
| 7692 | Welding shops, including automotive | 5211 | Windows, storm: wood or metal—retail |
| 6371 | Welfare pensions | 5182 | Wines—wholesale |
| 1381 | Well drilling—gas, oil, service, and water intake on a contract basis | 7011 | Winter resort hotels |
| 1389 | Well foundation building, at oil and gas wells: on a contract basis | 5093 | Wiping rags, including washing and reconditioning—wholesale |
| 1389 | Well foundation grading, oil and gas wells: on a contract basis | 7218 | Wiping towel supply service |
| 1389 | Well logging: on a contract basis | 5063 | Wire and cables, interior—wholesale |
| 1389 | Well plugging and abandoning, oil and gas wells: on a contract basis | 5039 | Wire fence, gates, and accessories—wholesale |
| 5082 | Well points (drilling equipment)—wholesale | 4821 | Wire or cable telegraph |
| | | 5051 | Wire rods—wholesale |
| | | 5051 | Wire rope or cable, not insulated—wholesale |
| | | 5051 | Wire screening—wholesale |
| | | 4811 | Wire telephone |
| | | 5051 | Wire—wholesale |

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STANDARD INDUSTRIAL CLASSIFICATION

5063 Wiring devices—wholesale
 5063 Wiring materials, interior—wholesale
 5063 Wiring supplies—wholesale
 1061 Wolframite mining
 9441 Women's bureaus
 5983 Wood (fuel) dealers—retail
 1752 Wood flooring—contractors
 5084 Woodworking machinery—wholesale
 4221 Wool and mohair warehousing
 0214 Wool production
 5159 Wool tops and nolls—wholesale
 5159 Wool, raw—wholesale
 5133 Woolen and worsted piece goods, woven—wholesale
 5199 Woolen and worsted yarns—wholesale
 7218 Work clothing supply service
 5136 Work clothing, men's and boys'—wholesale
 8331 Work experience centers (OIC, Goodwill, Job Corps, Lighthouse for the Blind)
 9651 Work safety and health program administration
 6153 Working capital financing
 9441 Workmen's compensation offices
 6331 Workmen's compensation insurance
 0279 Worm farms
 5133 Worsted and woolen piece goods, woven—wholesale
 5113 Wrapping paper and products—wholesale
 1795 Wrecking of buildings or other structures (other than marine)—contractors
 8999 Writers
 5112 Writing ink—wholesale
 5943 Writing supplies—retail
 1061 Wulfenite mining
 1499 Wurtsillite mining

X

7397 X-ray inspection service, industrial
 8071 X-ray laboratories (not manufacturing)
 5086 X-ray machines and tubes—wholesale

Y

4469 Yacht basins, operation of
 7399 Yacht brokers
 7997 Yacht clubs, membership
 5949 Yard goods stores—retail
 5133 Yard goods, woven—wholesale
 5949 Yarn shops (knitting)—retail
 5199 Yarns—wholesale
 5149 Yeast—wholesale
 7011 YMCA and YMHA hotels, open to the general public
 7999 Yoga instruction
 8641 Youth associations, except hotel units: YMCA, YWCA, YMHA, YWHA
 8321 Youth centers
 8399 Youth self-help agencies: Mobilization for Youth, HARYOU Act, Pride, Inc.
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1031 Zinc ore mining
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 1031 Zinc-blende (sphalerite) mining
 5051 Zinc—wholesale
 1031 Zincite mining
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 1099 Zirconium ore mining
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 7999 Zoological gardens, commercial
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Part III

**Numerical and Alphabetic Index
Manufacturing Industries**

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Numerical Index of Major Groups, Industry Groups, and Industries

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201 Meat Products

- 2011 Meat packing plants
- 2013 Sausages and other prepared meat products
- 2016 Poultry dressing plants
- 2017 Poultry and egg processing

202 Dairy Products

- 2021 Creamery butter
- 2022 Cheese, natural and processed
- 2023 Condensed and evaporated milk
- 2024 Ice cream and frozen desserts
- 2026 Fluid milk

203 Canned and Preserved Fruits and Vegetables

- 2032 Canned specialties
- 2033 Canned fruits, vegetables, preserves, jams, and jellies
- 2034 Dried and dehydrated fruits, vegetables and soup mixes
- 2035 Pickled fruits and vegetables, vegetable sauces and seasonings, and salad dressings
- 2037 Frozen fruits, fruit juices and vegetables
- 2038 Frozen specialties

204 Grain Mill Products

- 2041 Flour and other grain mill products
- 2043 Cereal breakfast foods
- 2044 Rice milling
- 2045 Blended and prepared flour
- 2046 Wet corn milling
- 2047 Dog, cat and other pet food
- 2048 Prepared feeds and feed ingredients for animals and fowls, not elsewhere classified

205 Bakery Products

- 2051 Bread and other bakery products, except cookies and crackers
- 2052 Cookies and crackers

206 Sugar and Confectionery Products

- 2061 Cane sugar, except refining only

- 2062 Cane sugar refining

- 2063 Beet sugar

- 2065 Candy and other confectionery products

- 2066 Chocolate and cocoa products

- 2067 Chewing gum

207 Fats and Oils

- 2074 Cottonseed oil mills

- 2075 Soybean oil mills

- 2076 Vegetable oil mills, except corn, cottonseed, and soybean

- 2077 Animal and marine fats and oils

- 2079 Shortening, table oils, margarine and other edible fats and oils, not elsewhere classified

208 Beverages

- 2082 Malt beverages

- 2083 Malt

- 2084 Wines, brandy, and brandy spirits

- 2085 Distilled, rectified, and blended liquors

- 2086 Bottled and canned soft drinks and carbonated waters

- 2087 Flavoring extracts and flavoring sirups, not elsewhere classified

209 Miscellaneous Food Preparations and Kindred Products

- 2091 Canned and cured fish and seafoods

- 2092 Fresh or frozen packaged fish and seafoods

- 2095 Roasted coffee

- 2097 Manufactured ice

- 2098 Macaroni, spaghetti, vermicelli, and noodles

- 2099 Food preparations, not elsewhere classified

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- 2111 Cigarettes

- 212 Cigars

- 2121 Cigars

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 - 2342 Brassieres, girdles, and allied garments
- 235 Hats, Caps, and Millinery
 - 2351 Millinery
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 - 2361 Girls', children's, and infants' dresses, blouses, waists, and shirts
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 - 2371 Fur goods
- 238 Miscellaneous Apparel and Accessories
 - 2381 Dress and work gloves, except knit and all-leather
 - 2384 Robes and dressing gowns
 - 2385 Raincoats and other water-proof outer garments
 - 2386 Leather and sheep lined clothing
 - 2387 Apparel belts
 - 2389 Apparel and accessories, not elsewhere classified
- 239 Miscellaneous Fabricated Textile Products
 - 2391 Curtains and draperies
 - 2392 Housefurnishings, except curtains and draperies
 - 2393 Textile bags
 - 2394 Canvas and related products
 - 2395 Pleating, decorative and novelty stitching, and tucking for the trade
 - 2396 Automotive trimmings, apparel findings, and related products
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- 24 LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE
 - 241 Logging Camps and Logging Contractors
 - 2411 Logging camps and logging contractors
 - 242 Sawmills and Planing Mills
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ABBREVIATIONS USED IN THIS INDEX

mach.—machinery.

m/pm—made from purchased materials or materials transferred from another establishment.

mitse—made in the same establishment as the basic materials.

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| <p>2011 Abattoirs, on own account or for the trade: except nonfood animals</p> <p>3842 Abdominal supporters, braces, and trusses</p> <p>3829 Abrasion testing machines</p> <p>3291 Abrasive buffs, bricks, cloth, paper, sticks, stones, wheels, etc.</p> <p>3291 Abrasive grains, natural and artificial</p> <p>3843 Abrasive points, wheels, and disks: dental</p> <p>3291 Abrasives, aluminous</p> <p>3842 Absorbent cotton, sterilized</p> <p>2621 Absorbent paper, <i>mitse</i></p> <p>3443 Absorbers, gas</p> <p>3823 Absorption analyzers, industrial process type: infra-red, X-ray, etc.</p> <p>2389 Academic caps and gowns</p> <p>3662 Accelerating waveguide structures</p> <p>3714 Acceleration equipment, motor vehicle</p> <p>3811 Acceleration indicators and systems components, aerospace type</p> <p>2869 Accelerators, rubber processing: cyclic and acyclic</p> <p>3829 Accelerometers, except aerospace type</p> <p>3931 Accordions and parts</p> <p>2782 Account books</p> <p>3574 Accounting machines, not using machine-readable programs</p> <p>3573 Accounting machines using machine-readable programs</p> <p>3443 Accumulators (industrial pressure vessels)</p> <p>3728 Accumulators, aircraft propeller</p> <p>2821 Acetal resins</p> <p>2869 Acetaldehyde</p> <p>2221 Acetate broad woven fabrics</p> <p>2823 Acetate fibers</p> | <p>2282 Acetate filament yarn: throwing, twisting, winding, or spooling</p> <p>2861 Acetate of lime, natural</p> <p>2281 Acetate yarn, made from purchased staple: spun</p> <p>2821 Acetate, cellulose (plastics)</p> <p>2869 Acetates, except natural acetate of lime</p> <p>2869 Acetic acid, synthetic</p> <p>2869 Acetic anhydride</p> <p>2869 Acetin</p> <p>2861 Acetone, natural</p> <p>2869 Acetone, synthetic</p> <p>2813 Acetylene</p> <p>3443 Acetylene cylinders</p> <p>3069 Acid bottles, rubber</p> <p>2865 Acid dyes, synthetic</p> <p>2869 Acid esters, amines, etc.</p> <p>2911 Acid oil</p> <p>2899 Acid resist for etching</p> <p>2899 Acid, battery</p> <p>2861 Acid, pyroligneous</p> <p>2026 Acidophilus milk</p> <p>2865 Acids, coal tar: derived from coal tar distillation</p> <p>2899 Acids, fatty: oleic, margaric, and stearic</p> <p>2819 Acids, inorganic: except nitric or phosphoric</p> <p>2911 Acids, naphthenic</p> <p>2865 Acids, naphtholsulfonic</p> <p>2291 Acoustic felts, except woven</p> <p>3296 Acoustical board and tile, mineral wool</p> <p>3275 Acoustical plaster, gypsum</p> <p>3446 Acoustical suspension systems, metal</p> <p>2869 Acrolein</p> <p>2822 Acrylate type rubbers</p> <p>2822 Acrylate-butadiene rubbers</p> <p>2282 Acrylic and modacrylic filament yarn: throwing, winding, or spooling</p> |
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STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|---|------|---|
| 2321 | Acrylic broad woven fabrics | 2881 | Aggressins |
| 2324 | Acrylic fibers | 2879 | Agricultural disinfectants |
| 2321 | Acrylic resins | 3423 | Agricultural edge tools, hand |
| 2322 | Acrylic rubbers | 3533 | Agricultural hand sprayers |
| 2261 | Acrylic yarn, made from purchased staple: spun | 3423 | Agricultural hand tools: hoes, rakes, spades, hay forks, etc. |
| 2369 | Acrylonitrile | 3533 | Agricultural implements and machinery |
| 2324 | Acrylonitrile fibers | 3274 | Agricultural lime |
| 2321 | Acrylonitrile-butadiene-styrene resins | 2879 | Agricultural pesticides |
| 2819 | Activated carbon and charcoal | 3728 | Ailerons, aircraft |
| 3728 | Actuators, aircraft: mechanical, electrical, and hydraulic | 3832 | Aiming circles (fire control equipment) |
| 3728 | Adapter assemblies, hydromatic propeller | 3041 | Air brake and air line hose, rubber or rubberized fabric |
| 3537 | Adapters for multi-weapon rack loading on aircraft | 3714 | Air brakes, motor vehicle |
| 3483 | Adapters, bombcluster | 3743 | Air brakes, railway |
| 2649 | Adding machine rolls, paper: <i>m/psm</i> | 3613 | Air circuit breakers, with interrupting ratings of over 10,000 amperes |
| 3574 | Adding machines | 3563 | Air compressors, for general industrial use |
| 3313 | Additive alloys, except copper: not produced in blast furnaces | 3585 | Air conditioning condensers and condensing units |
| 3579 | Address labeling machines | 3585 | Air conditioning units, complete: domestic and industrial |
| 3579 | Addressing machines, plates and plate embossers | 3444 | Air cowl, scoops, or airports (ship ventilators), sheet metal |
| 3842 | Adhesive tape and plasters, medicated or nonmedicated | 2394 | Air cushions, canvas |
| 2891 | Adhesives | 3822 | Air flow controllers, air-conditioning and refrigeration: except valves |
| 2891 | Adhesives, plastic | 3599 | Air intake filters, internal combustion engine |
| 2869 | Adipic acid | 3079 | Air mattresses, plastics |
| 2869 | Adipic acid esters | 3569 | Air motors |
| 2869 | Adiponitrile | 3443 | Air preheaters, nonrotating: plate type |
| 2822 | Adiprene | 3564 | Air purification and dust collection equipment |
| 3259 | Adobe brick | 3443 | Air receiver tanks, metal plate |
| 2333 | Adrenal derivatives: bulk, unpounded | 3944 | Air rifles, toy |
| 2334 | Adrenal pharmaceutical preparations | 3724 | Air scoops, aircraft |
| 2791 | Advertisement typesetting | 3569 | Air separators (machinery) |
| 3555 | Advertising and newspaper mats | 3069 | Air supported rubber structures |
| 3069 | Advertising balloons, rubber | 3662 | Air traffic control systems and equipment, electronic |
| 3999 | Advertising curtains | 3721 | Aircraft |
| 3993 | Advertising displays, except printed | 3357 | Aircraft and automotive wire and cable, nonferrous |
| 3993 | Advertising novelties | 3728 | Aircraft armament, except guns |
| 2752 | Advertising posters, lithographed | 3728 | Aircraft arresting device system |
| 3423 | Adzes | 3489 | Aircraft artillery |
| 3861 | Aerial cameras | 3728 | Aircraft assemblies, subassemblies, and parts, except engines |
| 3536 | Aerial work platforms, hydraulic or electric truck or carrier mounted | 3728 | Aircraft body assemblies and parts |
| 3499 | Aerosol valves, metal | 3662 | Aircraft control systems, electronic |
| 3443 | Aftercooler shells | | |
| 3443 | Aftercoolers, steam jet | | |
| 2831 | Agar culture media | | |
| 2833 | Agar-agar (ground) | | |
| 3531 | Aggregate spreaders | | |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

445

- 3537 Aircraft engine cradles
 3724 Aircraft engine starting vibrators
 3724 Aircraft engines and engine parts, internal combustion and jet propulsion
 3811 Aircraft flight instruments
 2271 Aircraft floor coverings, woven
 3429 Aircraft hardware
 3647 Aircraft lighting fixtures
 3537 Aircraft loading holsts
 **** Aircraft modification centers—classify according to principal activity
 3728 Aircraft power transmission equipment
 3728 Aircraft propeller parts
 3728 Aircraft propellers, variable and fixed pitch
 2531 Aircraft seats
 3564 Aircurtains (blower)
 3728 Airframe assemblies, except for guided missiles
 3769 Airframe assemblies, for guided missiles
 3443 Airlocks
 3728 Airplane brake expanders
 2211 Airplane cloth, cotton
 3999 Airplane models, except toy and hobby models
 3944 Airplane models, toy and hobby
 3721 Airplanes, fixed or rotary wing
 3944 Airplanes, toy
 3531 Airport construction machinery
 3612 Airport lighting transformers
 3721 Airships
 3811 Airspeed instrumentation (aeronautical instruments)
 2782 Albums
 2985 Alcohol for medicinal and beverage purposes, ethyl or grain
 2821 Alcohol resins, polyvinyl
 2869 Alcohol, aromatic
 2869 Alcohol, fatty: powdered
 2361 Alcohol, methyl: natural
 2869 Alcohol, methyl: synthetic (methanol)
 2361 Alcohol, wood: natural (methanol)
 2869 Alcohols, industrial: denatured (nonbeverage)
 2869 Alcohols, polyhydric
 2062 Ale
 2048 Alfalfa meal
 2048 Alfalfa meal, dehydrated or sun-cured
 2048 Alfalfa, prepared as feed for animals
 2869 Algin products
 3811 Alidades (surveying instruments)
 3728 Alighting assemblies (landing gear), aircraft
 2819 Alkali metals
 2812 Alkalies
 3691 Alkaline cell storage batteries
 2833 Alkaloids and salts
 2821 Alkyd resins
 2865 Alkylated diphenylamines, mixed
 2865 Alkylated phenol, mixed
 2911 Alkylates
 3799 All terrain vehicles (ATV)
 2831 Allergenic extracts
 2831 Allergens
 3325 Alloy steel castings: except investment
 3843 Alloys, dental
 2821 Allyl resins
 2099 Almond pastes
 2211 Alpacas, cotton
 2231 Alpacas, mohair: woven
 3281 Altars, cut stone
 2531 Altars, except stone and concrete
 3825 Alternator and generator testers
 3694 Alternators, automotive
 3811 Altimeters, standard and sensitive (aeronautical instruments)
 3569 Altitude testing chambers
 2819 Alumina
 3297 Alumina fused refractories
 3264 Alumina porcelain insulators
 3291 Aluminous abrasives
 3361 Aluminum and aluminum base castings and die castings
 3399 Aluminum atomized powder
 2819 Aluminum chloride
 3479 Aluminum coating of metal products for trade, not done in rolling mills
 2819 Aluminum compounds
 3341 Aluminum extrusion ingot, secondary
 3463 Aluminum forgings
 3361 Aluminum foundries
 2819 Aluminum hydroxide (alumina trihydrate)
 3334 Aluminum ingots and primary production shapes, from bauxite or alumina
 2819 Aluminum oxide
 3291 Aluminum oxide (fused) abrasives
 3334 Aluminum production, primary
 3341 Aluminum smelting and refining, secondary
 2819 Aluminum sulfate
 2819 Alums
 3532 Amalgamators (metallurgical and mining machinery)
 3843 Amalgams, dental
 2892 Amatol (explosive)

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| 3711 | Ambulances (motor vehicles) | 3825 | Analyzer for testing electrical characteristics |
| 3713 | Ambulance bodies | 3823 | Analyzers, industrial process type |
| 2869 | Amines of polyhydric alcohols, and of fatty and other acids | 3462 | Anchors, forged: not made in rolling mills |
| 2865 | Aminoanthraquinone | 3439 | Andirons |
| 2865 | Aminoazobenzene | 3841 | Anesthesia apparatus |
| 2865 | Aminoazotoluene | 2833 | Anesthetics, in bulk form |
| 2865 | Aminophenol | 2834 | Anesthetics, packaged |
| 3825 | Ammeters | 3429 | Angle irons, hardware |
| 2819 | Ammonia alum | 3545 | Angle rings |
| 2523 | Ammonia applicators and attachments (agricultural machinery) | 3811 | Angle-of-attack instrumentation |
| 2873 | Ammonia liquor | 3811 | Angle-of-yaw instrumentation |
| 2873 | Ammonia, anhydrous | 2873 | Anhydrous ammonia |
| 2843 | Ammonia, household | 2021 | Anhydrous milkfat |
| 2819 | Ammonium chloride, hydroxide, and molybdate | 2824 | Anidex fibers |
| 2819 | Ammonium compounds, except for fertilizer | 2865 | Aniline |
| 2873 | Ammonium nitrate and sulfate | 2865 | Aniline oil |
| 2819 | Ammonium perchlorate | 3496 | Animal and fish traps, made from purchased wire |
| 2874 | Ammonium phosphates | 2816 | Animal black |
| 2819 | Ammonium thiosulfate | 3523 | Animal clippers, hand and electric |
| 3483 | Ammunition and component parts, over 80 mm. (or over 1.18 inch) | 2048 | Animal feeds, prepared |
| 3482 | Ammunition and component parts, small arms: 80 mm. and below | 2283 | Animal fiber yarn: spinning, twisting, winding, or spooling |
| 3949 | Ammunition belts, sporting type: of all materials | 2077 | Animal oils, except medicinal grade |
| 3499 | Ammunition boxes, metal | 2833 | Animal oils, medicinal grade: refined and concentrated |
| 2441 | Ammunition boxes, wood | 2834 | Animal remedies |
| 2855 | Ammunition cans or tubes, paperboard laminated with metal foil: <i>m/fym</i> | 3429 | Animal traps, iron and steel: except wire |
| 3484 | Ammunition carts, machine gun | 3942 | Animals, stuffed: toy |
| 3483 | Ammunition loading and assembling plants | 2899 | Anise oil |
| 3825 | Ampere-hour meters | 3842 | Ankle supports, orthopedic |
| 3711 | Amphibian motor vehicles | 2252 | Anklets (hosiery), seamless or full-fashioned |
| 3795 | Amphibian tanks, military | 2861 | Anatto extract |
| 3662 | Amplifiers: other than radio, public address, and musical instrument | 3443 | Annealing boxes, pots, and covers |
| 3651 | Amplifiers: radio, public address, or musical instrument | 3898 | Annealing of metal for the trade |
| 3231 | Ampones, glass | 2753 | Announcements, engraved |
| 3599 | Amusement machines and equipment for carnivals | 3823 | Annunciators, relay and solid state types: industrial display |
| 3999 | Amusement machines, coin operated: except coin operated phonographs | 3471 | Anodizing (plating) of metals and formed products, for the trade |
| 2869 | Amyl acetate and alcohol | 3559 | Anodizing equipment (except rolling mill lines) |
| 2834 | Analgesics | 2879 | Ant poisons |
| 3573 | Analog computers | 2834 | Antacids |
| 3825 | Analog-to-digital converters, electronic instrumentation type | 3662 | Antennas, radar and communications |
| | | 3679 | Antennas, receiving: automobile, home, portable |
| | | 3662 | Antennas, television transmitting |
| | | 2834 | Anthelmintics |
| | | 2865 | Anthracene |
| | | 2865 | Anthraquinone dyes |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2881 Anti-hog-cholera serums
 3489 Antiaircraft artillery
 3832 Antiaircraft directors, except electronic
 2834 Antibiotics, packaged
 2883 Antibiotics: bulk uncompounded
 2899 Antifreeze compounds, except industrial alcohol
 3332 Antifriction bearing metals, lead-base: primary
 2881 Antigens
 2834 Antihistamine preparations
 3841 Antimonial lead refining, secondary
 3889 Antimony refining, primary
 2869 Antioxidants, rubber processing: cyclic and acyclic
 2834 Antipyretics
 2899 Antiscaling compounds, boiler
 2834 Antiseptics, medicinal
 2881 Antiserums
 3496 Antisubmarine and torpedo nets, made from purchased wire
 3489 Antisubmarine projectors (ordnance)
 2831 Antitoxins
 2831 Antivenom
 3462 Anvils, forged: not made in rolling mills
 2293 Apparel filling: cotton mill waste, kapok, and related materials
 2396 Apparel findings and trimmings, *m/fpm*
 2241 Apparel webbing
 2253 Apparel, except gloves, hosiery and underwear—*mitse*
 **** Apparel, plastic—code in Major Group 28 according to kind of apparel
 2085 Applejack
 3699 Appliance cords for electric irons, grills, waffle irons, etc.—*m/fpm*
 3469 Appliance parts, porcelain enameled
 3822 Appliance regulators, except switches
 3873 Appliance timers
 3842 Applicators, cotton tipped
 2499 Applicators, wood
 2395 Appliquing, for the trade
 2399 Aprons, breast (harness)
 2399 Aprons, except rubberized and plastic: women's, misses', and juniors'
 3199 Aprons, textile machinery: leather
 3069 Aprons, vulcanized rubber and rubberized fabric: *mitse*
 2385 Aprons, waterproof: except vulcanized rubber—*m/fpm*
 3199 Aprons: blacksmiths', welders', etc.—leather
 2842 Aqua ammonia, household
 2873 Aqua ammonia, made in ammonia plants
 3499 Aquarium accessories, metal
 3079 Aquarium accessories, plastics
 3231 Aquariums and reflectors, made from purchased glass
 3542 Arbor presses
 3545 Arbors (machine tool accessories)
 3693 Arc lamp units, electrotherapeutic: except infra-red and ultra-violet
 3648 Arc lamps, except electrotherapeutic
 3648 Arc lighting fixtures
 3623 Arc welders: generator, a.c. and d.c.
 3623 Arc welders, transformer-rectifier
 3623 Arc welders, transformers
 3623 Arc welding generators
 3842 Arch supports, orthopedic
 3949 Archery equipment
 2439 Arches, laminated lumber
 3446 Architectural metal work, ferrous and nonferrous
 3469 Architectural panels and parts, porcelain enameled
 3299 Architectural sculptures, plaster of paris: factory production only
 3299 Architectural sculptures: gypsum, clay, or papier mache
 3259 Architectural terra cotta
 3021 Arctics, rubber or rubber soled fabric
 3648 Area and sports luminaries
 3272 Areasways, basement window: concrete
 2813 Argon
 2389 Arm bands, elastic
 3622 Armature relays
 3694 Armatures, automobile
 3621 Armatures, industrial
 3483 Arming and fusing devices for missiles
 3462 Armor plate, forged iron and steel: not made in rolling mills
 3312 Armor plate, made in steel works or rolling mills
 3357 Armored cable or conductor, nonferrous: *m/fpm*
 2911 Aromatic chemicals, made in petroleum refineries
 3643 Arrestors and coils, lightning
 3949 Arrows, archery
 2879 Arsenates: calcium, copper, and lead—formulated
 2879 Arsenites, formulated
 3269 Art and ornamental ware, pottery
 3231 Art glass, made from purchased glass
 3229 Art glassware, made in glassmaking plants

- 2395 Art goods for embroidering, stamped: *m/fpm*
- 3299 Art goods: plaster of paris, papier mache, and scagliola
- 3272 Art marble, concrete
- 2392 Art needlework, *m/fpm*
- 2271 Art squares, woven textile fiber
- 2279 Art squares: twisted paper, grass, reed, coir, sisal, jute, and rag
- 2033 Artichokes in olive oil, bottled
- 3962 Artificial and preserved flowers, foliage, fruits, and vines: except glass
- 3281 Artificial flowers, foliage, fruits and vines: glass—*m/fpm*
- 3483 Artillery ammunition and component parts, over 80 mm. (or over 1.18 inch)
- 3469 Artillery parts, for artillery over 80 mm. (or over 1.18 inch)
- 3489 Artillery, over 80 mm.: aircraft, anti-aircraft, field, naval, and tank
- 3991 Artists' brushes, hand
- 3952 Artists' materials, except drafting instruments
- 3292 Asbestos cement products: siding, pressure pipe, conduits, ducts, etc.
- 2661 Asbestos paper and asbestos filled paper, *mitse*
- 3292 Asbestos products: except steam and other packing and gaskets
- 2223 Ascots: men's, youths', and boys'—*m/fpm*
- 3469 Ash cans, stamped and pressed metal
- 3229 Ash trays, glass
- 3269 Ash trays, pottery
- 3469 Ash trays, stamped metal
- 3272 Ashlar, cast stone
- 2911 Asphalt and asphaltic materials: liquid and solid—produced in refineries
- 2951 Asphalt and asphaltic mixtures for paving, not made in refineries
- 2661 Asphalt board and sheathing, *mitse*
- 3292 Asphalt floor tile
- 2851 Asphalt paints
- 2661 Asphalt paper: laminated—*mitse*
- 2951 Asphalt paving blocks, not made in petroleum refineries
- 3531 Asphalt plants, including travel-mix type
- 2952 Asphalt roof cement, not made in petroleum refineries
- 2952 Asphalt saturated board, made from purchased materials
- 2952 Asphalt saturated sheathing: made from purchased materials
- 3996 Asphalted-felt-base floor coverings
- 2951 Asphaltic concrete, not made in petroleum refineries
- 3711 Assembling complete automobiles, trucks, commercial cars, and buses
- 2531 Assembly hall furniture
- 2843 Assistants, textile and leather processing
- 2834 Astringents, medicinal
- 3949 Athletic and sporting goods: except clothing, firearms, and ammunition
- 2329 Athletic clothing: men's, youths', and boys'
- 2339 Athletic clothing: women's, misses', and juniors'
- 3149 Athletic shoes, except rubber
- 2252 Athletic socks
- 2752 Atlases, lithographed
- 2741 Atlases: publishing and printing, or publishing only
- 3662 Atom smasher (particle accelerators)
- 3569 Atomic engines
- 3443 Atomic waste casks
- 3842 Atomizers, medical
- 3999 Atomizers, other than medical
- 2333 Atropine and derivatives
- 3161 Attache cases, regardless of materials
- 3546 Attachments for portable drills
- 3679 Attenuators
- 3564 Attic fans
- 3651 Audio electronic systems, except communication
- 3825 Audio-frequency oscillators
- 3825 Audiometers
- 3569 Audiometric examination equipment
- 3592 Auger mining equipment
- 3423 Augers (edge tools)
- 3841 Auriscopes
- 2241 Auto wind lace
- 3843 Autoclaves, dental
- 3842 Autoclaves, hospital and surgical
- 3443 Autoclaves, industrial
- 3811 Autoclaves, laboratory
- 3721 Autogiros
- 2761 Autographic register forms, printed
- 3541 Automatic chucking machines
- 3494 Automatic control valves
- 3811 Automatic pilots, aircraft
- 3541 Automatic screw machines
- 3711 Automobile bodies, passenger car
- 2271 Automobile floor coverings, woven
- 3429 Automobile hardware
- 3647 Automobile headlights and spotlights
- 3041 Automobile hose, plastics
- 3041 Automobile hose, rubber

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3792 Automobile house trailer chassis
 3469 Automobile license tags, stamped metal
 3534 Automobile lifts (elevators)
 2842 Automobile polishes
 2399 Automobile seat covers, *mfp*
 3499 Automobile seat frames, metal
 2531 Automobile seats
 3496 Automobile skid chains, made from purchased wire
 3493 Automobile springs
 3465 Automobile stampings: fenders, tops, hub caps, body parts, trim, etc.
 3799 Automobile trailer chassis, except house trailer
 3799 Automobile trailers, except house and recreational
 2396 Automobile trimmings, fabric
 3536 Automobile wrecker hoists
 3713 Automobile wrecker-truck body
 3711 Automobiles
 3944 Automobiles and trucks, toys
 3944 Automobiles, children's
 3825 Automotive ammeters and voltmeters
 3357 Automotive and aircraft wire and cable, nonferrous
 3694 Automotive electrical equipment
 2211 Automotive fabrics, cotton
 2221 Automotive fabrics, man-made fiber
 2291 Automotive felts, except woven
 3647 Automotive lighting fixtures
 3549 Automotive maintenance equipment
 3714 Automotive wiring harness sets, other than ignition
 3931 Autophones (organs with perforated music rolls)
 3799 Autos, midget: power driven
 3612 Autotransformers for switchboards, except telephone switchboards
 3661 Autotransformers for telephone switchboards
 3612 Autotransformers, electric (power transformers)
 3573 Auxiliary storage units
 3648 Aviation, runway approach, taxi and ramp lighting fixtures
 3423 Awns
 2211 Awning stripes, cotton: *mitse*
 2394 Awning stripes, painted: *mfp*
 2394 Awnings, fabric: *mfp*
 3079 Awnings, fiber glass and plastics combination
 3444 Awnings, sheet metal
 2431 Awnings, wood
 3423 Axes
 3714 Axle housings and shafts, motor vehicle
 3714 Axles, motor vehicle
 3462 Axles, railroad: forged—not made in rolling mills
 3312 Axles, rolled or forged: made in steel works or rolling mills
 2271 Axminster carpets
 2892 Azides (explosives)
 2865 Azine dyes
 2865 Azo dyes
 2865 Azobenzene
 2865 Azolic dyes
- B**
- 3332 Babbitt metal, primary
 3341 Babbitt metal, secondary smelting and refining
 2032 Baby foods, canned (including meats)
 2023 Baby formula: fresh, processed, and bottled
 3069 Baby pants, vulcanized rubber and rubberized fabric: *mitse*
 2844 Baby powder
 3576 Baby scales
 3531 Backfillers, self-propelled
 3432 Backflow preventors
 3531 Backhoe mounted, hydraulically powered attachments
 3531 Backhoes
 2514 Backs for metal household furniture
 2013 Bacon, side and sliced: *mfp*
 2011 Bacon, slab and sliced: *mitse*
 2831 Bacterial vaccines
 2831 Bacterins
 3811 Bacteriological laboratory instruments: except medical, optical and dental
 2831 Bacteriological media
 3999 Badges, for policemen, firemen, etc.—metal
 2399 Badges, made from fabric
 3949 Badminton equipment
 3443 Baffles
 3554 Bag and envelope making machinery (paper machinery)
 3111 Bag leather
 3483 Bag loading plants, ammunition
 2621 Bag paper, *mitse*
 3636 Bag seaming and closing machines (sewing machinery)
 3949 Bagatelle tables

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STANDARD INDUSTRIAL CLASSIFICATION

- 2051 Bagels
 2399 Bagging, jute: made in jute weaving mills
 3161 Bags (luggage), regardless of material
 3211 Bags and bagging, cotton: made in weaving mills
 2259 Bags and bagging, made in knitting mills
 2393 Bags and containers, textile except sleeping bags: insulated or not—*m/psm*
 2393 Bags, blanket: plastic
 2751 Bags, cellophane: letterpress and screen printing
 3199 Bags, feed: for horses
 2392 Bags, garment storage: made of any material except paper
 3949 Bags, golf
 2393 Bags, laundry—*m/psm*
 3949 Bags, rosin
 3069 Bags, rubber or rubberized fabric
 2399 Bags, sleeping
 3949 Bags, striking (punching)
 2393 Bags, textile including canvas: except laundry, garment and sleeping—*m/psm*
 2643 Bags: cement, flour, grocers', mothproof, shopping, shipping—*m/psm*
 3443 Bails, ladle
 3949 Bait, fishing: artificial
 2032 Baked beans with pork, canned
 2099 Baked beans, except canned
 2032 Baked beans, without meat: canned
 2038 Baked goods, frozen: except bread and bread-type rolls
 2051 Bakeries, manufacturing for home service delivery
 2051 Bakeries: wholesale, wholesale and retail combined
 2026 Bakers' cheese
 2087 Bakers' colors, except synthetic
 2499 Bakers' equipment, wood
 2099 Bakers' malt
 2328 Bakers' service apparel, washable
 3551 Bakery machinery
 2052 Bakery products, "dry": biscuits, crackers, pretzels, etc.
 2051 Bakery products, "perishable": bread, cakes, doughnuts, pastries, etc.
 2051 Bakery products, partially cooked (not frozen)
 2066 Baking chocolate
 2351 Baking japs
 2099 Baking powder
 3811 Balances, laboratory
 3576 Balances: coin-operated, automatic computing, etc., except laboratory
 3549 Balancing equipment, automotive wheel (garage equipment)
 3545 Balancing machines (machine tool accessories)
 3446 Balconies, ferrous and nonferrous
 2261 Bale dyeing of cotton broad woven fabrics
 2262 Bale dyeing of man-made fiber and silk broad woven fabrics
 2231 Bale dyeing of yarn and fabrics, of wool and similar fibers: except knit
 3523 Bale throwers
 3496 Bale ties, made from purchased wire
 3523 Balers: hay, cotton, etc.
 3423 Baling hooks
 3569 Baling machines, for scrap metal, paper, and similar materials
 3562 Ball bearings and parts
 3568 Ball joints, except automobile and aircraft
 3951 Ball point pens
 3531 Ballast distributors
 3423 Ballast forks
 3612 Ballasts for lighting fixtures
 3612 Ballasts, fluorescent
 3149 Ballet slippers
 3761 Ballistic missiles, complete
 2211 Balloon cloth, cotton
 3721 Balloons (aircraft)
 3069 Balloons, advertising and toy: rubber
 3079 Balloons, metal foil laminated with plastics
 3069 Balloons, metal foil laminated with rubber
 3079 Balloons, plastics
 3069 Balls, rubber: except baseballs, basketballs, footballs, golf and tennis
 3399 Balls, steel
 3949 Balls: baseball, basketball, football, golf, tennis, pool, and bowling
 3677 Baluns
 2211 Bandage cloths, cotton
 3842 Bandages and dressings, surgical and orthopedic
 2399 Bandages, cheese: *m/psm*
 3842 Bandages: plastic, muslin, plaster of paris, etc.
 2342 Bandeaux, *m/psm*
 2241 Banding, spindle
 2399 Bandoleers
 3079 Bands, cellulose

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

451

- 3069 Bands, rubber
 3351 Bands, shell: copper and copper alloy—
 made in copper rolling mills
 3070 Bands, viscose
 3553 Bandsaws, woodworking
 3931 Banjos and parts
 3811 Bank and turn indicators and compo-
 nents (aeronautical instruments)
 3499 Bank chests, metal
 3446 Bank fixtures, ornamental metal
 2753 Bank notes, engraved
 3944 Banks, toy
 2399 Banners, made from fabric
 3446 Bannisters, railings, guards, etc.: made
 from pipe
 3281 Baptismal fonts, cut stone
 2542 Bar fixtures, metal
 2541 Bar fixtures, wood
 2599 Bar furniture
 3547 Bar mills
 2033 Barbecue sauce
 3631 Barbecues, grills, and braziers for out-
 door cooking
 3496 Barbed wire, made from purchased wire
 3999 Barber shop equipment
 3999 Barbers' clippers, hand and electric
 3421 Barbers' scissors
 2328 Barbers' service apparel, washable
 3421 Barbers' shears, hand
 2833 Barbituric acid and derivatives: bulk,
 uncompounded
 2834 Barbituric acid pharmaceutical prepara-
 tions
 3441 Barge sections, prefabricated metal
 3731 Barges, building and repairing
 2819 Barium compounds
 2816 Barium sulfate, precipitated (blanc fixé)
 3295 Barium, ground or otherwise treated
 2211 Bark cloth, cotton
 2292 Barren laces
 3523 Barn cleaners
 3523 Barn stanchions and standards
 3829 Barometers, mercury and aneroid types
 3443 Barometric condensers
 2429 Barrel heading and staves, sawed or split
 3489 Barrels, gun: over 30 mm. (or over 1.18
 inch)
 3484 Barrels, gun: 30 mm. (or 1.18 inch) and
 below
 3412 Barrels, shipping: steel and other metal
 2449 Barrels, wood: coopered
 3499 Barricades, metal
 3354 Bars, aluminum: extruded
 3355 Bars, aluminum: rolled
 2065 Bars, candy: including chocolate covered
 bars
 2066 Bars, candy: solid chocolate
 3449 Bars, concrete reinforcing: fabricated
 steel
 3351 Bars, copper and copper alloy
 3312 Bars, iron: made in steel works or rolling
 mills
 3423 Bars, prying (hand tools)
 3331 Bars, refinery: primary copper
 3316 Bars, steel: cold rolled—not made in hot
 rolling mills
 3312 Bars, steel: made in steel works or hot
 rolling mills
 3356 Bars: lead, magnesium, nickel, tin, tita-
 nium, zinc, and their alloys
 3229 Barware, glass
 3295 Barytes (barite), ground or otherwise
 treated
 2816 Barytes pigments
 2352 Baseball caps
 3949 Baseball equipment and supplies, except
 uniforms
 2329 Baseball uniforms: men's, youths', and
 boys'
 3442 Baseboards, floor: metal
 2431 Baseboards, floor: wood
 3949 Bases, baseball
 2844 Bases, perfume: blending and com-
 pounding
 2211 Basket weave fabrics, cotton
 3949 Basketball equipment and supplies, ex-
 cept uniforms
 2329 Basketball uniforms: men's, youths', and
 boys'
 2499 Baskets, except fruit, vegetable, fish and
 bait: rattan, reed, straw, etc.
 3949 Baskets, fish and bait
 2449 Baskets, fruit and vegetable: till, berry,
 climax, round stave, etc.
 3496 Baskets, made from purchased wire
 3944 Baskets, toy
 2253 Basque shirts, *mitte*
 2519 Bassinets, reed and rattan
 3931 Bassoons
 3531 Batching plants, bituminous
 3531 Batching plants, for aggregate concrete
 and bulk cement
 2392 Bath mitts (wash cloths)
 2844 Bath salts
 3069 Bath sprays, rubber
 3069 Bathing caps and suits, rubber

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STANDARD INDUSTRIAL CLASSIFICATION

2253	Bathing suits, <i>mitse</i>	3149	Beach sandals, except rubber
2329	Bathing suits: men's, youths', and boys'— <i>mfp</i>	3021	Beach sandals, rubber
2339	Bathing suits: women's, misses', and juniors'— <i>mfp</i>	3999	Beach umbrellas
2272	Bathmat sets, tufted	3723	Beaching gear, aircraft
2211	Bathmats, cotton: made in weaving mills	2253	Beachwear, <i>mitse</i>
3069	Bathmats, rubber	2369	Beachwear: girls', children's, and infants'— <i>mfp</i>
2272	Bathmats, tufted	2339	Beachwear: women's, misses', and juniors'— <i>mfp</i>
2271	Bathmats, woven textile fiber: not made in weaving mills	3999	Beaded novelties
2384	Bathrobes, men's and women's: <i>mfp</i>	3542	Beaders, metal (machines)
2253	Bathrobes, <i>mitse</i>	3231	Beads, glass reflector: for highway signs and other reflectors
2369	Bathrobes: girls', children's, and infants'— <i>mfp</i>	3999	Beads, unassembled
3261	Bathroom accessories, vitreous china and earthenware	3552	Beaming machines, textile
3431	Bathroom fixtures: enameled iron, cast iron, and pressed metal	2232	Beaming yarns, for the trade
3576	Bathroom scales	2032	Bean sprouts, canned
3272	Bathtubs, concrete	2032	Beans with meat, canned
3431	Bathtubs: enameled iron, cast iron, and pressed metal	2099	Beans, baked: except canned
2211	Batiste, cotton	2032	Beans, baked: without meat—canned
3949	Bats: baseball, cricket, etc.	3423	Bearing pullers (hand tools)
3692	Batteries, primary: dry or wet	3562	Bearings, ball and roller
3691	Batteries, storage	3714	Bearings, motor vehicle: except ball and roller
2899	Battery acid	3568	Bearings, plain
3069	Battery boxes, jars, and parts: hard rubber	3079	Bearings, plastics
3694	Battery cable wiring sets for internal combustion engines	2499	Bearings, wood
3079	Battery cases, plastics or plastics composition	3999	Beauty shop equipment
3629	Battery chargers, rectifying or nonrotating	3634	Bed coverings, electric
3694	Battery charging generators, automobile and aircraft	2292	Bed sets, lace
3229	Battery jars, glass	2211	Bed sheeting, cotton: <i>mitse</i>
3356	Battery metal	2211	Bed tickings, cotton
2891	Battery sealing compounds	2253	Bedjackets, <i>mitse</i>
2499	Battery separators, wood	2341	Bedjackets: women's, misses', and juniors'— <i>mfp</i>
3825	Battery testers, electrical	2599	Beds, hospital
3272	Battery wells and boxes, concrete	2511	Beds, including folding and cabinet beds: household—wood
2233	Batts and batting: cotton mill waste, kapok, and related materials	2514	Beds, including folding and cabinet beds: household—metal
2849	Batts, insulating: paper— <i>mfp</i>	2515	Beds, sofa and chair: on frames of any material
3297	Bauxite brick	2511	Bedside stands, wood
2319	Bauxite, refined	2392	Bedspreads and bed sets, <i>mfp</i>
2899	Bay oil	2211	Bedspreads, cotton: made in weaving mills
2844	Bay rum	2292	Bedspreads, lace: made on lace machines
3483	Bazooka rockets	2259	Bedspreads, made in knitting mills
3489	Bazookas (rocket projectors)	2221	Bedspreads, silk and man-made fiber: <i>mitse</i>
		2514	Bedspring frames, metal
		2511	Bedspring frames, wood
		2515	Bedsprings, assembled

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2013 Beef stew
 2013 Beef, dried: *mjpm*
 2011 Beef, *mitse*
 3312 Beehive coke oven products
 3999 Beekeeping supplies, except wood
 2499 Beekeeping supplies, wood
 2082 Beer (alcoholic beverage)
 3411 Beer cans, metal
 3585 Beer dispensing equipment
 2086 Beer, birch and root: bottled or canned
 2842 Beeswax, processing of
 2063 Beet sugar
 2834 Belladonna pharmaceutical preparations
 3769 Bellows assemblies for missiles, metal
 3429 Bellows, hand
 3599 Bellows, industrial: metal
 3931 Bells (musical instruments)
 3699 Bells, electric
 3944 Bells, toy
 3535 Belt conveyor systems, for general industrial use
 2842 Belt dressing
 3199 Belt laces, leather
 2296 Belting (industrial) reinforcement, cord and fabric
 3111 Belting butts, curried or rough
 3111 Belting leather
 3568 Belting, chain
 2399 Belting, fabric: *mjpm*
 3041 Belting: conveyor, elevator, transmission, etc.—rubber
 2241 Beltings, woven or braided
 3199 Belts and belting for machinery, leather
 3949 Belts, ammunition (sporting goods): of all materials
 2387 Belts, apparel: made of any material
 3949 Belts, cartridge: sporting type
 3496 Belts, conveyor: made from purchased wire
 3496 Belts, drying: made from purchased wire
 3484 Belts, machine gun, metallic: 30 mm. (or 1.18 inch) and below
 2399 Belts, money: made of any material
 3199 Belts, safety: leather
 3842 Belts: sanitary, surgical, and corrective
 2531 Benches for public buildings
 3281 Benches, cut stone
 3311 Benches, laboratory
 2522 Benches, office: metal
 2521 Benches, office: wood
 3542 Bending and forming machines
 3496 Bends, pipe: fabricated from purchased pipe
 2499 Bentwood (steam bent) products, except furniture
 2865 Benzaldehyde
 2865 Benzene hexachloride (BHC)
 2911 Benzene, produced in petroleum refineries
 2865 Benzene, product of coal tar distillation
 2865 Benzoic acid
 2911 Benzol, produced in petroleum refineries
 2865 Benzol, product of coal tar distillation
 3523 Berry and grain separators (agricultural machinery)
 2449 Berry crates, wood wirebound
 2449 Berry cups, veneer and splint
 3264 Beryllia porcelain insulators
 3369 Beryllium castings
 3339 Beryllium metal
 2819 Beryllium oxide
 3662 Betatrons
 2789 Beveling of cards
 2085 Beverage alcohol, ethyl and grain
 2087 Beverage bases
 2087 Beverage sirups
 2086 Beverages, nonalcoholic: bottled or canned
 2396 Bias bindings, *mjpm*
 3069 Bibs, vulcanized rubber and rubberized fabric: *mitse*
 2385 Bibs, waterproof: *mjpm*
 2819 Bichromates and chromates
 3647 Bicycle lamps
 3751 Bicycles and parts
 3261 Bidets, vitreous china
 3547 Billet mills
 3312 Billets, steel
 3079 Billfold inserts, plastics
 3172 Billfolds, regardless of material
 2752 Billheads, lithographed
 3949 Billiard and pool balls, cues, cue tips, and tables
 3949 Billiard chalk
 2231 Billiard cloths, *mitse*
 3574 Billing machines
 2298 Binder and baler twine
 2899 Binders (chemical foundry supplies)
 2782 Binders, loose leaf
 2631 Binders' board, *mitse*
 3579 Binding machines, plastic and adhesive: for store or office use
 2789 Binding only: books, pamphlets, magazines, etc.
 2396 Bindings, bias: *mjpm*
 2396 Bindings, cap and hat: *mjpm*
 2241 Bindings, textile: *mitse*

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STANDARD INDUSTRIAL CLASSIFICATION

- 3944 Bingo boards (games)
 3811 Binnacles (compass housings)
 3832 Binoculars
 3443 Bins, prefabricated metal plate
 3444 Bins, prefabricated: sheet metal
 2831 Biological and allied products: anti-tox-
 ins, bacterins, vaccines, viruses
 2865 Biological stains
 3841 Biopsy instruments and equipment
 2086 Birch beer, bottled or canned
 3490 Bird cages, made from purchased wire
 2047 Bird food, prepared
 2211 Bird's-eye diaper cloth, cotton
 2771 Birthday cards, except hand painted:
 printed, engraved, lithographed, etc.
 **** Birthday cards, hand painted—see non-
 manufacturing
 3551 Biscuit cutters (machines)
 2045 Biscuit dough, canned: *mjpm*
 2041 Biscuit dough, canned: *mitse*
 2045 Biscuit flour, prepared: *mjpm*
 2051 Biscuits, baked: baking powder and
 raised
 2052 Biscuits, baked: dry, except baking pow-
 der and raised
 3339 Bismuth refining, primary
 3423 Bits (edge tools for woodworking)
 3545 Bits for use on lathes, planers, shapers,
 etc.
 3532 Bits, rock: except oil field tools
 3533 Bits, rock: oil field tools
 2067 Bitters (flavoring concentrates)
 3531 Bituminous batching plants
 2851 Bituminous paints
 2816 Black pigments, except carbon black
 3231 Blackboards, slate
 2531 Blackboards, wood
 2842 Blackings
 3312 Blackplate
 3199 Blacksmiths' aprons, leather
 2061 Blackstrap molasses
 3531 Blades for graders, scrapers, dozers, and
 snow plows
 3728 Blades, aircraft propeller: metal or wood
 3421 Blades, knife and razor
 3425 Blades, saw: for hand or power saws
 2816 Blanc fixe (barium sulfate, precipitated)
 3482 Blank cartridges, 30 mm. (or 1.18 inch)
 and below
 2782 Blankbook making
 2392 Blanket bags, plastic
 2221 Blanketings, man-made fiber
 2211 Blankets and blanketings, cotton: *mitse*
 2231 Blankets and blanketings, of wool and
 similar fibers: *mitse*
 3292 Blankets, asbestos
 3634 Blankets, electric
 2399 Blankets, horse: *mjpm*
 3292 Blankets, insulating for aircraft: asbes-
 tos
 2649 Blankets, insulating: paper—*mjpm*
 2392 Blankets, *mjpm*
 3239 Blanks for electric light bulbs, glass
 3963 Blanks, button
 2426 Blanks, wood: for bowling pins, handles,
 and textile mach. accessories
 3569 Blast cleaning equipment, dustless: ex-
 cept metalworking
 3312 Blast furnace products
 3295 Blast furnace slag
 3629 Blasting machines, electrical
 2298 Blasting mats, rope
 2892 Blasting powder and blasting caps
 2531 Bleacher seating, portable
 2844 Bleaches, hair
 2842 Bleaches, household: liquid or dry
 3099 Bleaching and dyeing of sponges
 2261 Bleaching cotton broad woven fabrics
 3552 Bleaching machinery, textile
 2262 Bleaching man-made fiber and silk broad
 woven fabrics
 2819 Bleaching powder
 2269 Bleaching raw stock, yarn, and narrow
 fabrics: except knit and wool
 2231 Bleaching yarn and fabrics, of wool and
 similar fibers: except knit fabric
 2261 Bleaching, kier: continuous machine
 3825 Bleed control cabinets (engine testers)
 2045 Blended flour, *mjpm*
 3634 Blenders, electric
 2844 Blending and compounding perfume
 bases
 2099 Blending tea
 2431 Blinds (shutters), wood
 2591 Blinds, venetian
 2591 Blinds, vertical
 3079 Blister and bubble formed packaging,
 plastics
 3331 Blister copper
 2097 Block ice
 3275 Block, gypsum
 3555 Blocking wood for engravers
 3271 Blocks, concrete and cinder
 3331 Blocks, copper
 3555 Blocks, engravers': wood
 3255 Blocks, fire clay

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3229 Blocks, glass
 3999 Blocks, hat
 3332 Blocks, lead: primary
 3281 Blocks, paving: cut stone
 3299 Blocks, sand lime
 3259 Blocks, segment: clay
 3599 Blocks, swage
 3429 Blocks, tackle: metal
 2499 Blocks, tackle: wood
 2499 Blocks, tailors' pressing: wood
 3944 Blocks, toy
 2426 Blocks, wood: for bowling pins, handles, and textile mach. accessories
 3333 Blocks, zinc
 2331 Blood derivatives, for human or veterinary use
 2011 Blood meal
 3841 Blood pressure apparatus
 3811 Blood testing apparatus
 3841 Blood transfusion equipment
 3547 Blooming and slabbing mills
 3312 Blooms
 2621 Blotting paper, *mitse*
 2321 Blouses, boys': *mjpm*
 2253 Blouses, *mitse*
 2361 Blouses: girls', children's and infants'—*mjpm*
 2331 Blouses: women's, misses', and juniors'—*mjpm*
 3423 Blow torches
 3564 Blower filter units (furnace blowers)
 3523 Blowers and cutters, ensilage
 3564 Blowers, exhaust fans, and air moving equipment
 3523 Blowers, forage
 3931 Blowers, pipe organ
 3634 Blowers, portable: electric
 3861 Blueprint cloth or paper, sensitized
 3861 Blueprint reproduction machines and equipment
 2899 Bluing
 3296 Board, acoustical: mineral wool
 2952 Board, asphalt saturated: *mjpm*
 2499 Board, bagasse
 2661 Board, building: composition, cellular fiber, and hard pressed—*mitse*
 2661 Board, building: except gypsum—*mitse*
 2649 Board, building: laminated—*mjpm*
 2645 Board, chip: pasted—*mjpm*
 2631 Board, except building board: *mitse*
 3275 Board, gypsum
 2492 Board, particle
 2499 Boards, bulletin: wood and cork
 3952 Boards, drawing: artists'
 2499 Boards: clip, ironing, meat, and pastry—wood
 3832 Boards: plotting, spotting, and gun fire adjustment
 3647 Boat and ship lighting fixtures
 3537 Boat cradles
 2392 Boat cushions
 3732 Boat kits, wooden (not a model)
 3536 Boat lifts
 3999 Boat models, except toy and hobby models
 3944 Boat models, toy and hobby
 3732 Boats, fiber glass: building and repairing
 3079 Boats, nonrigid: plastics
 3732 Boats, rigid: plastic
 3732 Boats: motorboats, sailboats, rowboats, and canoes—building and repairing
 2426 Bobbin blocks and blanks, wood
 2292 Bobbinet (lace goods)
 3552 Bobbins for textile machinery
 2655 Bobbins, fiber: *mjpm*
 3728 Bodies, aircraft: not complete aircraft
 3713 Bodies, dump
 3711 Bodies, passenger automobile
 3713 Bodies, truck (motor vehicle)
 3465 Body parts, automobile: stamped
 2844 Body powder
 2253 Body stockings, *mitse*
 3489 Bofors guns
 3443 Boiler casing: metal plate
 2899 Boiler compounds, antiscaling
 3823 Boiler controls: industrial, power, and marine type
 3494 Boiler couplings and drains
 3292 Boiler covering (heat insulating material), except felt
 2291 Boiler covering, felt
 3494 Boiler gauge cocks, metal
 3443 Boiler shop products: industrial boilers, smokestacks, and steel tanks
 3599 Boiler tube cleaners
 3317 Boiler tubes, wrought: *mjpm*
 3433 Boilers, low-pressure heating: steam or hot water
 3443 Boilers: industrial, power, and marine
 2013 Bologna, *mjpm*
 3261 Bolt caps, vitreous china and earthenware
 3452 Bolts, iron and steel
 2411 Bolts, wood: handle, heading, shingle, stave, etc.
 3537 Bomb lifts
 3483 Bomb loading and assembling plants

STANDARD INDUSTRIAL CLASSIFICATION:

- | | | | |
|------|--|------|--|
| 3728 | Bomb racks, aircraft | 3612 | Boosters, feeder voltage (electric transformers) |
| 3537 | Bomb trucks | 3181 | Boot and shoe cut stock and findings |
| 2311 | Bombazine, cotton | 2499 | Boot and shoe lasts, regardless of material |
| 3483 | Bombcluster adapters | 3559 | Boot making and repairing machinery |
| 3483 | Bombs and parts | 3444 | Booths, spray: prefabricated sheet metal |
| 2399 | Bombs, flashlight | 2542 | Booths, telephone: metal |
| 2631 | Bond paper, <i>misc</i> | 2541 | Booths, telephone: wood |
| 2064 | Bonded storerooms, engaged in blending wines | 3143 | Boots, canvas and leather: except athletic—men's |
| 2297 | Bonded-fiber textiles, except felt | 3144 | Boots, canvas and leather: except athletic—women's |
| 3479 | Bonderizing of metal and metal products, for the trade | 3143 | Boots, dress and casual: men's |
| 2816 | Bone black | 3199 | Boots, horse |
| 3262 | Bone china | 3021 | Boots, plastics |
| 3841 | Bone drills | 3021 | Boots, rubber or rubber soled fabric |
| 2648 | Bone meal, prepared as feed for animals and fowls | 2819 | Borax (sodium tetraborate) |
| 3999 | Bone novelties | 2879 | Bordeaux mixture |
| 3841 | Bone plates and screws | 3832 | Boreoscopes |
| 3841 | Bone rongeurs | 2819 | Boric acid |
| 2013 | Boneless meat, <i>mfp</i> | 3545 | Boring machine attachments (machine tool accessories) |
| 2211 | Book cloth, <i>misc</i> | 3541 | Boring machines (machine tools) |
| 2731 | Book clubs, publishing | 3541 | Boring mills |
| 3499 | Book ends, metal | 3541 | Boring, drilling, and milling machine combinations |
| 2789 | Book gilding, bronzing, edging, deckling, embossing, and gold stamping | 3291 | Boron carbide abrasives |
| 3999 | Book matches | 2819 | Boron compounds, not produced at mines |
| 2732 | Book music: printing, printing and binding—not publishing | 2819 | Borosilicate |
| 2731 | Book music: publishing and printing, or publishing only | 3291 | Bort, crushing |
| 2641 | Book paper, coated: <i>mfp</i> | 2834 | Botanical extracts: powdered, pillular, solid, and fluid |
| 2621 | Book paper, <i>misc</i> | 2833 | Botanical products, medicinal: ground, graded, and milled |
| 3251 | Book tile, clay | 2631 | Bottle cap board, <i>misc</i> |
| 3111 | Bookbinders' leather | 2645 | Bottle caps and tops, die-cut from purchased paper or paperboard |
| 3555 | Bookbinders' machines | 3466 | Bottle caps and tops, stamped metal |
| 2789 | Bookbinding: edition, job, library, and trade | 3079 | Bottle caps, molded plastics |
| 2514 | Bookcases, household: metal | 2499 | Bottle corks |
| 2511 | Bookcases, household: wood | 2499 | Bottle covers: willow, rattan, and reed |
| 2522 | Bookcases, office: metal | 3496 | Bottle openers, made from purchased wire |
| 2521 | Bookcases, office: wood | 3469 | Bottle openers, stamped metal |
| 3574 | Bookkeeping machines | 3634 | Bottle warmers, household: electric |
| 2648 | Books, memorandum: except printed— <i>mfp</i> | 3079 | Bottle warmers, plastics |
| 3944 | Books, toy: picture and cutout | 3221 | Bottles for packing, bottling, and canning: glass |
| 2732 | Books: printing, printing and binding—not publishing | 2654 | Bottles, milk: paper— <i>mfp</i> |
| 2731 | Books: publishing and printing, or publishing only | 2655 | Bottles, paper fiber: <i>mfp</i> |
| 3949 | Boomerangs | 3079 | Bottles, plastics |
| 2411 | Booming timber | 3069 | Bottles, rubber |
| 3483 | Boosters and bursters | 3429 | Bottles, vacuum |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3551 Bottling machinery: washing, sterilizing, filling, capping, labeling, etc.
 2086 Bottling of carbonated nonalcoholic beverages
 3645 Boudoir lamps
 2099 Bouillon cubes
 2999 Boulets (fuel bricks), made with petroleum binder
 3999 Boutiquing: decorating gift items with sequins, fruit, etc., for the trade
 3079 Bowl covers, plastics
 3949 Bowling alleys and accessories
 2599 Bowling establishment furniture
 2426 Bowling pin blanks
 3949 Bowling pin machines, automatic
 3949 Bowling pins
 3229 Bowls, glass
 2499 Bowls, wood: turned and shaped
 3949 Bows, archery
 3131 Bows, shoe
 2323 Bowties
 2441 Box cleats, wood
 2421 Box lumber
 2099 Box lunches, for sale off premises
 3554 Box making machines, for paper boxes
 3553 Box making machines, for wooden boxes
 2441 Box shook
 2515 Box springs, assembled
 3131 Box toes, leather (shoe cut stock)
 2631 Boxboard, *misc*
 3499 Boxes for packing and shipping, steel
 3499 Boxes, ammunition: metal
 3443 Boxes, annealing
 3469 Boxes, cash and stamp: stamped metal
 2441 Boxes, cigar: wood and part wood
 3443 Boxes, condenser: metal plate
 2653 Boxes, corrugated and solid fiber: *m/pcm*
 2651 Boxes, folding paperboard: *m/pcm*
 3069 Boxes, hard rubber
 3161 Boxes, hat: except paper or paperboard
 3199 Boxes, leather
 3585 Boxes, metal: insulated
 2652 Boxes, newsboard: metal edged—*m/pcm*
 3079 Boxes, plastics
 2652 Boxes, set-up paperboard: *m/pcm*
 3952 Boxes, sketching and paint
 2655 Boxes, vulcanized fiber: *m/pcm*
 2441 Boxes, wood: plain or fabric covered, nailed or lock corner
 2449 Boxes, wood: wirebound
 3644 Boxes: junction, outlet, switch, and fuse (electric wiring devices)
 3949 Boxing equipment
 2342 Bra-lettes, *m/pcm*
 3842 Braces, elastic
 3842 Braces, orthopedic
 3299 Brackets, architectural: plaster—factory production only
 3429 Brackets, iron and steel
 2431 Brackets, wood
 3315 Brads, steel: wire or cut
 3399 Brads: aluminum, brass, and other non-ferrous metal and wire
 2269 Braided goods except wool: bleaching, dyeing, printing and other finishing
 3552 Braiding machines, textile
 2396 Braids, millinery
 3999 Braids, puffs, switches, wigs, etc.—made of hair or other fiber
 2241 Braids, textile
 2241 Braids, tubular nylon and plastic
 3569 Brake burnishing and washing machines
 3714 Brake drums
 2992 Brake fluid, hydraulic
 3292 Brake lining, asbestos
 3069 Brake lining, rubber
 3292 Brake lining, sintered metal and ceramic materials
 3321 Brake shoes, railroad: cast iron
 3714 Brakes and brake parts, motor vehicle
 3728 Brakes, aircraft
 3751 Brakes, bicycle: friction clutch and other
 3622 Brakes, electromagnetic
 3542 Brakes, metal forming
 3743 Brakes, railway: air and vacuum
 2041 Bran and middlings, except rice
 2044 Bran, rice
 3953 Branding irons, for marking purposes
 2084 Brandy
 2084 Brandy spirits
 3362 Brass castings and die castings
 3362 Brass foundries
 3432 Brass goods, plumbers'
 3351 Brass rolling and drawing
 3341 Brass smelting and refining, secondary
 2342 Brassieres, *m/pcm*
 3446 Brasswork, ornamental: structural
 3631 Braziers, barbecue
 2861 Brazilwood extract
 3398 Brazing (hardening) metal for the trade
 2899 Brazing fluxes
 **** Brazing—see nonmanufacturing
 2051 Bread
 2041 Bread and bread-type roll mixes, *misc*
 2045 Bread and bread-type roll mixes, *m/pcm*
 2099 Bread crumbs, not made in bakeries

STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|---|------|--|
| 3551 | Bread slicing and wrapping machines | 2322 | Briefs: men's, youths', and boys'— <i>m/psm</i> |
| 2752 | Bread wrappers, lithography only | 2319 | Brine |
| 2641 | Bread wrappers, waxed or laminated:
<i>m/psm</i> | 2035 | Brining of fruits and vegetables |
| 2754 | Bread wrappers, gravure printing | 2999 | Briquettes (fuel bricks): made with
petroleum binder |
| 2751 | Bread wrappers, letterpress and screen
printing | 2499 | Briquettes, sawdust or bagasse: non-
petroleum binder |
| 2051 | Bread, brown: Boston and other—canned | 3999 | Bristles, dressing of |
| 3532 | Breakers, coal | 2631 | Bristols, bogus: <i>mitse</i> |
| 3531 | Breakers, paving | 2631 | Bristols, except bogus: <i>mitse</i> |
| 3432 | Breakers, vacuum: plumbing | 3356 | Britannia metal, rolling and drawing |
| 2043 | Breakfast foods, cereal | 3545 | Broaches (machine tool accessories) |
| 2514 | Breakfast sets (furniture), metal | 3843 | Broaches, dental |
| 2511 | Breakfast sets (furniture), wood | 3541 | Broaching machines |
| 2299 | Breast aprons (harness) | 2311 | Broad woven fabrics, cotton |
| 3443 | Breechings, metal plate | 2331 | Broad woven fabrics, of wool, mohair,
and similar fibers |
| 2082 | Breweries | 2221 | Broad woven fabrics, silk and man-made
fiber |
| 3551 | Brewers' and malsters' machinery | 2299 | Broad woven fabrics: linen, jute, hemp,
and ramie |
| 2082 | Brewers' grain | 3662 | Broadcasting equipment, radio and tele-
vision |
| 2861 | Brewers' pitch, product of softwood dis-
tillation | 2211 | Broadcloth, cotton |
| 3999 | Bric-a-brac | 2311 | Brocade, cotton |
| 3559 | Brick making machines | 2311 | Brocatelle, cotton |
| 2952 | Brick siding, asphalt | 3634 | Broilers, electric |
| 3291 | Brick, abrasive | 2819 | Bromine, elemental |
| 3259 | Brick, adobe | 2869 | Bromochloromethane |
| 3297 | Brick, bauxite | 3841 | Bronchoscopes |
| 3297 | Brick, carbon | 3362 | Bronze castings and die castings |
| 3255 | Brick, clay refractory: fire clay and high
alumina | 3362 | Bronze foundries |
| 3271 | Brick, concrete | 2893 | Bronze ink |
| 3229 | Brick, glass | 3351 | Bronze rolling and drawing |
| 3255 | Brick, ladle: clay | 3341 | Bronze smelting and refining, secondary |
| 3297 | Brick, refractory: chrome, magnesite,
silica, and other nonclays | 3952 | Bronze, artists': mixtures, powders,
paints, etc. |
| 3299 | Brick, sand lime | 3555 | Bronzing and dusting machines, for the
printing trade |
| 3297 | Brick, silicon carbide | 2789 | Bronzing books, cards, or paper |
| 3251 | Brick: common face, glazed, vitrified,
and hollow—clay | 3523 | Brooders |
| 2396 | Bridal veils | 3559 | Broom making machinery |
| 3569 | Bridge and gate machinery, hydraulic | 3991 | Brooms, hand and machine: bamboo,
wire, fiber, splint or other material |
| 3441 | Bridge sections, highway: prefabricated | 3711 | Brooms, powered (motor vehicles) |
| 2392 | Bridge sets (cloths and napkins) | 2091 | Broth, clam: canned |
| 2514 | Bridge sets (furniture), metal | 2632 | Broth, except seafood: canned |
| 2511 | Bridge sets (furniture), wood | 2051 | Brown bread, Boston and other: canned |
| 2491 | Bridges and trestles, wood: treated | 3861 | Brownprint paper and cloth, sensitized |
| 3949 | Bridges, billiard and pool | 3861 | Brownprint reproduction machines and
equipment |
| 3931 | Bridges, piano | 2833 | Brucine and derivatives |
| 3825 | Bridges: Kelvin, Wheatstone, vacuum
tube, megohm, etc. | 3624 | Brush blocks, carbon or molded graphite |
| 3111 | Bridle leather | | |
| 3161 | Briefcases, regardless of material | | |
| 2254 | Briefs, <i>mitse</i> | | |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2426 Brush blocks, wood: turned and shaped
 3079 Brush handles, plastics
 3324 Brushes and brush stock contacts: carbon, graphite, etc.—electric
 3991 Brushes for vacuum cleaners, carpet sweepers, and other rotary machines
 3952 Brushes, air: artists'
 3991 Brushes, household and industrial
 3069 Brushes, rubber
 3541 Brushing machines (metalworking machinery)
 3443 Bubble towers
 3432 Bubblers, drinking fountain
 3531 Bucket and scarifier teeth
 3535 Bucket type conveyor systems, for general industrial use
 3949 Buckets, fish and bait
 3079 Buckets, plastics
 2449 Buckets, wood: coopered
 3531 Buckets: clamshell, concrete, dragline, drag scraper, shovel, etc.
 3964 Buckle blanks and molds
 3964 Buckles and buckle parts, except shoe buckles
 3131 Buckles, shoe
 2211 Buckram
 2295 Buckram: varnished, waxed, and impregnated
 2041 Buckwheat flour
 2511 Buffets (furniture)
 3541 Buffing and polishing machines (machine tools)
 3391 Buffing and polishing wheels, abrasive and nonabrasive
 3471 Buffing for the trade
 3546 Buffing machines, hand: electric
 3111 Buffings, russet
 3931 Bugles and parts (musical instruments)
 3429 Builders' hardware, including locks and lock sets
 3275 Building board, gypsum
 2649 Building board, laminated: *m/fpm*
 2661 Building board, *mitse*
 3211 Building glass, flat
 3274 Building lime
 3392 Building materials, asbestos: except asbestos paper
 3372 Building materials, concrete: except block and brick
 3079 Building panels: corrugated and flat plastics
 2649 Building paper, laminated: *m/fpm*
 2661 Building paper: sheathing, insulation, saturating, and dry felts—*mitse*
 3322 Building services monitoring controls, automatic
 3272 Building stone, artificial: concrete
 3281 Building stone, natural: cut—including combination with quarrying
 3251 Building tile: clay
 3448 Buildings, prefabricated and portable: metal
 2452 Buildings, prefabricated and portable: wood
 3299 Built-up mica
 3229 Bulbs for electric lights, without filaments or sockets: *mitse*
 3969 Bulbs for medicine droppers, syringes, atomizers, sprays: rubber
 3641 Bulbs, electric light: complete
 3531 Bulldozers (construction machinery)
 3542 Bulldozers (metalworking machinery)
 3482 Bullet jackets and cores, 30 mm. (or 1.18 inch) and below
 2499 Bulletin boards, wood and cork
 3842 Bulletproof vests
 3714 Bumpers and bumperettes, motor vehicle
 3462 Bumping posts, railroad: forged—not made in rolling mills
 2499 Bungs, wood
 2051 Buns (bakery products)
 3811 Bunsen burners
 2211 Bunting cloths, *mitse*
 2369 Buntings, infants': *m/fpm*
 3823 Buoyancy instruments, industrial process type
 2499 Buoys, cork
 3443 Buoys, metal
 3662 Burglar alarm apparatus, electric
 3995 Burial cases, metal and wood
 3272 Burial vaults, concrete and precast terrazzo
 3995 Burial vaults, fiberglass
 3281 Burial vaults, stone
 2299 Burlap, jute
 2231 Burling and mending cloth for the trade
 2411 Burls, wood
 3433 Burners, gas: domestic
 3433 Burners, oil: domestic and industrial
 3398 Burning metal for the trade
 3952 Burnishers and cushions, gilders'
 3569 Burnishing and washing machines, brake
 2842 Burnishing ink
 3541 Burnishing machines (machine tools)

3199	Burnt leather goods	3636	Buttonhole and eyelet machines and attachments, domestic and industrial
2087	Burnt sugar (food color)	2395	Buttonhole making, except fur: for the trade
3999	Burnt wood articles	2371	Buttonhole making, fur
3843	Burs, dental	3963	Buttons, of all materials except precious metal or semiprecious stones
3613	Bus bar structures	3999	Buttons: Red Cross, union, identification
3643	Bus bars (electrical conductors)	2869	Butyl acetate, alcohol, and propionate
3713	Bus bodies (motor vehicle)	2869	Butyl ester solution of 2,4-D
3715	Bus trailers, tractor type	2822	Butyl rubber
3711	Buses, motor: except trackless trolley		C
3743	Buses, trackless trolley	3423	C-clamps
3423	Bush hooks	3429	Cabinet hardware, including locks and lock sets
3362	Bushings and bearings: brass, bronze, copper (nonmachined)	3553	Cabinet makers' machinery
3325	Bushings, cast steel: except investment	3861	Cabinets, cassette film transfer
3069	Bushings, rubber	3843	Cabinets, dental
2499	Bushings, wood	2599	Cabinets, factory
2754	Business forms, except manifold: gravure printing	3632	Cabinets, household refrigerator: metal and wood
2751	Business forms, except manifold: letterpress and screen printing	2514	Cabinets, kitchen: metal
2752	Business forms, except manifold: lithographed	2434	Cabinets, kitchen: wood—factory made
2761	Business forms, manifold	3811	Cabinets, laboratory
2821	Butadiene copolymers, containing less than 50% butadiene	2514	Cabinets, medicine: metal
2822	Butadiene rubbers	2522	Cabinets, office: metal
2822	Butadiene-acrylonitrile copolymers (over 50% butadiene)	2521	Cabinets, office: wood
2822	Butadiene-styrene copolymers (over 50% butadiene)	2514	Cabinets, radio and television: metal
2869	Butadiene, from alcohol	2519	Cabinets, radio and television: plastic
2911	Butadiene, from petroleum	3585	Cabinets, show and display: refrigerated
3421	Butchers' knives	2542	Cabinets, show, display, and storage: except refrigerated—metal
2542	Butchers' store fixtures, metal	2541	Cabinets, show, display, and storage: except refrigerated—wood
2541	Butchers' store fixtures, wood	2434	Cabinets, to be built-in: wood
2311	Butter cloths	2517	Cabinets: radio, phonograph, and sewing machine—wood
2449	Butter crates, wood: wirebound	3329	Cable testing machines
3551	Butter making and butter working machinery	3443	Cable trays, metal plate
2021	Butter oil	3355	Cable, aluminum: made in rolling mills
2021	Butter, creamery and whey	2298	Cable, fiber
2099	Butter, ladle	3357	Cable, nonferrous: bare, insulated, or armored— <i>m/fpm</i>
2099	Butter, renovated and processed	3315	Cable, steel: insulated or armored
2079	Butterine	3496	Cable, uninsulated wire: made from purchased wire
2048	Buttermilk emulsion for animal food	3713	Cabs, for agricultural tractors
2026	Buttermilk, cultured	3713	Cabs, for industrial trucks
2023	Buttermilk: concentrated, condensed, dried, evaporated, and powdered	2066	Cacao bean products: chocolate, cocoa butter, and cocoa
2033	Butters, fruit	2066	Cacao beans: shelling, roasting, and grinding for making chocolate liquor
3963	Button backs and parts	3799	Caddy cars
3963	Button blanks and molds		
3963	Button coloring for the trade		
3636	Button sewing machines		

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3949 Caddy carts
 3339 Cadmium refining, primary
 2819 Caesium metal
 3589 Cafeteria food warming equipment
 2599 Cafeteria furniture
 2833 Caffeine and derivatives
 3532 Cages, mine shaft
 3496 Cages, wire: made from purchased wire
 3489 Caisson limbers
 3443 Calissons, metal plate
 2099 Cake fillings, except fruits, vegetables, and meat
 2045 Cake flour, *m/psm*
 2041 Cake flour, *mtsc*
 2045 Cake mixes, prepared: *m/psm*
 2065 Cake ornaments, confectionery
 2046 Cake, corn oil
 2051 Cakes (bakery products)
 2032 Cakes: Italian, Spanish, Mexican, Chinese, etc.
 2351 Calcimines, dry and paste
 2999 Calcined petroleum coke: made from purchased materials
 3567 Calcining kilns (industrial furnaces)
 2861 Calcium acetate, product of hardwood distillation
 2879 Calcium arsenate and arsenite, formulated
 2819 Calcium carbide, chloride, and hypochlorite
 2819 Calcium compounds, inorganic
 2819 Calcium metal
 2874 Calcium metaphosphates
 2869 Calcium oxalate
 2843 Calcium salts of sulfonated oils, fats, or greases
 3573 Calculating machines, electronic: utilizing machine-readable programs
 3574 Calculating machines, not utilizing machine-readable programs
 2753 Calendars, engraved
 3999 Calendars, framed
 2752 Calendars, lithographed
 2754 Calendars: gravure printing
 2751 Calendars: letterpress and screen printing
 2261 Calendering of cotton fabrics
 2262 Calendering of man-made fiber and silk broad woven fabrics
 2231 Calendering of wool, mohair, and similar fiber fabrics: except knit
 3523 Calf savers (farm equipment)
 2013 Calf's foot jelly
 3811 Calibration tapes, for physical testing machines
 3545 Calipers and dividers
 2891 Calking compounds
 3423 Calking guns
 3546 Calking hammers
 3423 Calking tools, hand
 3462 Calks, horseshoe: forged—not made in rolling mills
 3931 Calliopes (steam organs)
 2819 Calomel
 3811 Calorimeters
 2211 Cambric, cotton
 2295 Cambric: varnished, waxed, and impregnated
 3011 Camelback for tire retreading
 3161 Camera carrying bags, plastic
 3861 Cameras, microfilm
 3861 Cameras, still and motion picture: all types
 2211 Camouflage nets, *mtsc*
 2298 Camouflage nets, not made in weaving mills
 2514 Camp furniture, metal
 2519 Camp furniture, reed and rattan
 2511 Camp furniture, wood: except reed and rattan
 3792 Campers, for mounting on trucks
 2869 Camphor, synthetic
 3792 Camping trailers and chassis
 3545 Cams (machine tool accessories)
 3714 Camshafts, motor vehicle
 2097 Can ice
 3496 Can keys, made from purchased wire
 3542 Can making machines
 3423 Can openers, except electric
 3634 Can openers, electric
 3579 Canceling machinery, post office
 2655 Candelabra tubes, fiber: *m/psm*
 2065 Candied fruits and fruit peel
 3999 Candle shades, except glass and metal
 3999 Candles
 3229 Candlesticks, glass
 2065 Candy bars, including chocolate covered bars
 2065 Candy, except solid chocolate
 2066 Candy, solid chocolate
 3423 Cane knives
 2061 Cane sirup, made from sugarcane
 2062 Cane sirup, made in sugar refineries from purchased sugar

STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|---|------|---|
| 2062 | Cane sugar refineries | 2389 | Caps and gowns, academic |
| 2062 | Cane sugar, refined: made from purchased raw cane sugar or sugar sirup | 3643 | Caps and plugs, attachment: electric |
| 2061 | Cane sugar: clarified, granulated, and raw—made from sugarcane | 2645 | Caps and tops, bottle: die cut from purchased paper or paperboard |
| 2499 | Cane, chair: woven of reed or rattan | 3466 | Caps and tops, bottle: stamped metal |
| 3999 | Canes and cane trimmings, except precious metal | 2892 | Caps, blasting and detonating |
| 3842 | Canes, orthopedic | 3261 | Caps, bolt: vitreous china and earthenware |
| 3483 | Canisters, ammunition | 3483 | Caps, bomb |
| 2091 | Canned fish, crustacea, and mollusks | 3079 | Caps, bottle: molded plastics |
| 2033 | Canned fruits and vegetables | 3079 | Caps, cellulose |
| 2018 | Canned meats, except baby foods: <i>m/psm</i> | 2352 | Caps, cloth: men's and boys'— <i>m/psm</i> |
| 2011 | Canned meats, except baby foods: <i>mitse</i> | 2399 | Caps, for toy pistols |
| 3551 | Canning and packing machinery, food | 2371 | Caps, fur |
| 2086 | Canning of carbonated nonalcoholic beverages | 3131 | Caps, heel and toe: leather or metal |
| 3841 | Cannulae | 2253 | Caps, <i>mitse</i> |
| 3732 | Canoes, building and repairing | 3069 | Caps, rubber |
| 2394 | Canopies, fabric: <i>m/psm</i> | 3531 | Capstans, ship |
| 3444 | Canopies, sheet metal | 2899 | Capsules, gelatin: empty |
| 3411 | Cans, aluminum | 3532 | Car dumpers, mining |
| 3469 | Cans, ash and garbage: stamped and pressed metal | 3429 | Car seals, metal |
| 2655 | Cans, composite: foil-fiber and other combinations, <i>m/psm</i> | 3589 | Car washing machinery, including coin-operated |
| 2655 | Cans, fiber (metal end or all fiber): <i>m/psm</i> | 3321 | Car wheels, railroad: chilled cast iron |
| 3411 | Cans, metal | 3312 | Car wheels, rolled |
| 3479 | Cans, retinning of: not done in rolling mills | 3079 | Carafes, plastics |
| 3423 | Cant hooks (hand tools) | 2819 | Carbide |
| 2221 | Canton crepes | 3484 | Carbines, 30 mm. (or 1.18 inch) and below |
| 2211 | Canton flannels, cotton | 2821 | Carbohydrate plastics |
| 2421 | Cants, resawed (lumber) | 2892 | Carbohydrates, nitrated (explosives) |
| 3952 | Canvas board, artists' | 3693 | Carbon arc lamp units, electrotherapeutic: except infra-red, ultra-violet |
| 2394 | Canvas products, except bags and knapsacks: <i>m/psm</i> | 2869 | Carbon bisulfide (disulfide) |
| 3021 | Canvas shoes, rubber soled | 2895 | Carbon black |
| 3952 | Canvas, artists': prepared on frames | 3297 | Carbon brick |
| 2211 | Canvas, <i>mitse</i> | 2813 | Carbon dioxide |
| 2396 | Cap fronts and visors | 3955 | Carbon paper for typewriters, sales books, etc. |
| 3469 | Capacitor and condenser cans and cases: stamped metal | 2899 | Carbon removing solvent |
| 2621 | Capacitor paper, <i>mitse</i> | 3624 | Carbon specialties for electrical use |
| 3629 | Capacitors, a.c.: for motors and fluorescent lamp ballasts | 2869 | Carbon tetrachloride |
| 3675 | Capacitors, electronic: fixed and variable | 2819 | Carbon, activated |
| 3629 | Capacitors, except electronic: fixed and variable | 2086 | Carbonated beverages, nonalcoholic: bottled or canned |
| 2337 | Capes, except fur and vulcanized rubber: women's, misses', and juniors' | 2812 | Carbonates, potassium and sodium |
| 3069 | Capes, vulcanized rubber and rubberized fabric: <i>mitse</i> | 3585 | Carbonators, soda water |
| | | 2294 | Carbonized rags |
| | | 3552 | Carbonizing equipment (wool processing machinery) |
| | | 2299 | Carbonizing of wool, mohair, and similar fibers |
| | | 3624 | Carbons, electric |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3624 Carbons, lighting
 3221 Carboys, glass
 3592 Carburetors, all types
 3172 Card cases, of all materials except precious metal
 3552 Card clothing for textile machines
 2645 Card cutting
 3573 Card punching, sorting, and tabulating machines
 2211 Card roll fabrics, cotton
 2645 Cardboard foundations and cut-outs, *m/psm*
 2645 Cardboard panels and cut-outs, *m/psm*
 2631 Cardboard, *misc*
 2645 Cardboard: pasted, laminated, lined, and surface coated—*m/psm*
 3292 Carded fiber, asbestos
 2281 Carded yarn, cotton
 3552 Carding machines, textile
 3693 Cardiodynamometer
 3693 Cardiographs
 3693 Cardophone, electronic
 3693 Cardioscope
 3693 Cardiotachometer
 2645 Cards, cut and designed: unprinted—*m/psm*
 2753 Cards, except greeting cards: engraving of
 2754 Cards, except greeting: gravure printing
 2751 Cards, except greeting: letterpress and screen printing
 2771 Cards, greeting: except hand painted
 **** Cards, greeting: hand painted—see non-manufacturing
 2645 Cards, index: die-cut from purchased materials
 2645 Cards, jacquard: *m/psm*
 2645 Cards, jewelers': *m/psm*
 2752 Cards, lithographing only
 2645 Cards, plain paper: die-cut or rotary cut from purchased materials
 2754 Cards, playing: gravure printing
 2751 Cards, playing: letterpress and screen printing
 2645 Cards, tabulating and time recording: die-cut from purchased paperboard
 2789 Cards: beveling, bronzing, deckling, edging, and gilding
 2448 Cargo container and pallet combination, wood or wood and metal combination
 2298 Cargo nets (cordage)
 3537 Cargo platforms
 3731 Cargo vessels, building and repairing
 3931 Carillon bells
 3599 Carnival amusement machines and equipment
 3599 Carousels (merry-go-rounds)
 2291 Carpet cushions, felt
 2291 Carpet linings, felt
 2392 Carpet linings, textile: except felt
 3589 Carpet sweepers, except household electric vacuum sweepers
 2281 Carpet yarn, cotton
 2283 Carpet yarn: wool, mohair, or similar animal fiber
 3996 Carpets, asphalted-felt-base (linoleum)
 2499 Carpets, cork
 2272 Carpets, tufted
 2271 Carpets, woven textile fiber
 2279 Carpets: twisted paper, grass, reed, coir, sisal, jute, and rag
 3448 Carports, prefabricated: metal
 3944 Carriages, baby
 3944 Carriages, doll
 3489 Carriages, gun: for artillery over 30 mm. (or over 1.18 inch)
 2542 Carrier cases and tables, mail: metal
 3661 Carrier equipment, telephone and telegraph
 2441 Carrier trays, wood
 3531 Carriers, crane
 3743 Cars and car equipment, freight or passenger
 3711 Cars, armored
 3443 Cars, for hot metal
 3537 Cars, industrial: except automotive cars and trucks, and mining cars
 3532 Cars, mining
 3944 Cars, play (children's vehicles)
 3949 Cartridge belts, sporting type
 3482 Cartridge cases for ammunition, 30 mm. (or 1.18 inch) and below
 3351 Cartridge cups, discs, and sheets: copper and copper alloy
 3546 Cartridge-activated hand power tools
 3951 Cartridges, refill: for ball point pens
 3482 Cartridges, 30 mm. (or 1.18 inch) and below: empty, blank, loaded
 3524 Carts or wagons, for lawn and garden
 3949 Carts, caddy
 3944 Carts, doll
 3949 Carts, golf: hand
 3496 Carts, grocery: made from purchased wire
 3484 Carts, machine gun and machine gun ammunition

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|------|---|------|---|
| 2599 | Carts, restaurant equipment | 3634 | Casserroles, electric |
| 2499 | Carved and turned wood (except furniture) | 3321 | Cast iron pipe |
| 3553 | Carving machines, woodworking | 3325 | Cast steel railroad car wheels |
| 3421 | Carving sets: except stainless, silver, silver plated, or other all metal | 3272 | Cast stone, concrete |
| 3914 | Carving sets: silver, nickel silver, and stainless steel (all metal) | 3255 | Castable refractories, clay |
| 2426 | Carvings, furniture: wood | 3297 | Castable refractories, nonclay |
| 3111 | Case leather | 3429 | Casters, furniture |
| 2824 | Casein fibers | 3429 | Casters, industrial |
| 2821 | Casein plastics | 3079 | Casting of plastics, for the trade |
| 3079 | Casein products, molded for the trade | 3361 | Castings, aluminum and aluminum base |
| 2023 | Casein, dry and wet | 3321 | Castings, gray iron and semisteel |
| 2211 | Casement cloth, cotton | 3322 | Castings, malleable iron |
| 3442 | Casements, aluminum | 3369 | Castings, nonferrous metal except aluminum, copper, and copper base alloy |
| 3873 | Cases for watches | 3369 | Castings, precision: industrial and aircraft use—cobalt-chromium |
| 2522 | Cases, filing: metal | 3069 | Castings, rubber |
| 2521 | Cases, filing: wood | 3325 | Castings, steel: except investment |
| 3172 | Cases, glasses: regardless of material | 3362 | Castings: brass, bronze, copper, and copper base alloy |
| 3949 | Cases, gun and rod (sporting equipment) | 2076 | Castor oil and pomace |
| 3172 | Cases, jewelry: regardless of materials | 3143 | Casual shoes, men's: except athletic and rubber footwear |
| 3161 | Cases, leather (luggage) | 2047 | Cat food |
| 2655 | Cases, mailing: paper fiber (metal end or all fiber)— <i>m/fpm</i> | 2621 | Catalog paper, <i>misc</i> |
| 3161 | Cases, musical instrument | 2754 | Catalogs: gravure printing (not publishing) |
| 2441 | Cases, packing: wood-nailed or lock corner | 2751 | Catalogs: letterpress, and screen printing (not publishing) |
| 3079 | Cases, plastics | 2741 | Catalogs: publishing and printing, or publishing only |
| 2441 | Cases, shipping: wood-nailed or lock corner | 2819 | Catalysts, chemical |
| 2449 | Cases, shipping: wood—wirebound | 3489 | Catapult guns |
| 3585 | Cases, show and display: refrigerated | 3599 | Catapults |
| 3911 | Cases: cigar, cigarette, vanity—precious metal | 3531 | Catch basin cleaners |
| 2517 | Cases: radio, phonograph, sewing machine—wood | 3272 | Catch basin covers, concrete |
| 3469 | Cash and stamp boxes, stamped metal | 3211 | Cathedral glass |
| 3574 | Cash registers, including adding machines with cash drawers | 3841 | Catheters |
| 2869 | Casing fluids, for curing fruits, spices, tobacco, etc. | 3672 | Cathode ray television receiving type tubes |
| 3443 | Casing, boiler: metal plate | 3673 | Cathode ray tubes, except television receiving type |
| 3769 | Casings for missiles and missile components, shipping and storage | 2033 | Catsup |
| 3443 | Casings, rocket | 2879 | Cattle dips |
| 2013 | Casings, sausage: natural | 3523 | Cattle feeding, handling, and watering equipment |
| 3443 | Casings, scroll | 3523 | Cattle oilers (farm equipment) |
| 3444 | Casings, sheet metal | 2011 | Cattle slaughtering plants |
| 3429 | Casket hardware | 2812 | Caustic potash |
| 3995 | Casket linings | 2812 | Caustic soda |
| 3995 | Caskets, metal and wood | 2091 | Caviar, canned and preserved |
| 2449 | Casks, wood: coopered | 2511 | Cedar chests |
| | | 2421 | Ceiling lumber, dressed |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3272 Ceiling squares, concrete
 3079 Cellophane
 2641 Cellophane adhesive tape, *m/psm*
 2843 Cellophane bags, unprinted : *m/psm*
 3931 Cellos and parts
 3079 Celluloid
 3079 Celluloid products, molded for the trade
 2821 Cellulose acetate (plastics)
 2823 Cellulose acetate monofilament, yarn, staple, or tow
 2869 Cellulose acetate, unplasticized
 2823 Cellulose fibers, man-made
 2823 Cellulose fibers, regenerated
 2821 Cellulose nitrate resins
 2821 Cellulose propionate (plastics)
 3079 Cellulose, regenerated : except fibers
 2891 Cement (cellulose nitrate base)
 2643 Cement bags, *m/psm*
 3559 Cement kilns, rotary
 3559 Cement making machinery
 3531 Cement silos (batch plant)
 3255 Cement, clay refractory
 3843 Cement, dental
 3241 Cement, hydraulic : portland, natural, masonry, pozzolan
 3275 Cement, Keene's
 2891 Cement, linoleum
 3297 Cement, magnesia
 2891 Cement, mending
 2952 Cement, roofing : asphalt, fibrous plastic
 2891 Cement, rubber
 3297 Cement : high temperature, refractory (nonclay)
 **** Cemented tungsten carbide products—classify on basis of product
 3541 Centering machines
 3229 Centerpieces, glass
 3573 Central processing units for electronic computing systems
 3273 Central-mixed concrete
 3569 Centrifugal purifiers
 3569 Centrifuges, industrial
 3811 Centrifuges, laboratory
 3299 Ceramic fiber
 3251 Ceramic glazed brick, clay
 3567 Ceramic kilns and furnaces
 3253 Ceramic tile, floor and wall : glazed and unglazed
 2043 Cereal preparations and breakfast foods
 2041 Cereals, cracked grain : *mitse*
 2819 Cerium salts
 2753 Certificates, security : engraved
 3842 Cervical collars
 2211 Chafer fabrics, cotton
 3728 Chaffing dispensers, aircraft
 3634 Chafing dishes, electric
 3429 Chain fittings
 3446 Chain ladders
 3546 Chain saws, portable
 3425 Chain type saw blades
 3496 Chain, welded : made from purchased wire
 3496 Chain, wire : made from purchased wire
 3462 Chains, forged steel : not made in rolling mills
 3811 Chains, surveyors'
 2515 Chair and couch springs, assembled
 2515 Chair beds, on frames of any material
 2392 Chair covers, cloth
 2426 Chair frames for upholstered furniture, wood
 3499 Chair frames, metal
 3429 Chair glides
 2392 Chair pads, except felt
 2426 Chair seats, hardwood
 2426 Chair stock, hardwood : turned, shaped, or carved
 2511 Chairs, bentwood
 2519 Chairs, cane
 3843 Chairs, dentists'
 2511 Chairs, except upholstered, household : wood
 3999 Chairs, hydraulic : barber and beauty shop
 2522 Chairs, office : metal—padded or plain
 2521 Chairs, office : wood—padded, upholstered, or plain
 2512 Chairs, overstuffed or upholstered on wood frames
 2531 Chairs, portable folding : wood or metal
 2531 Chairs, tablet arm
 3842 Chairs, wheel
 3949 Chalk, billiard
 3952 Chalk : carpenters', blackboard, marking, artists', tailors', etc.
 3281 Chalkboards, slate
 2531 Chalkboards, wood
 2211 Chambrays
 3541 Chamfering machines
 3111 Chamois leather
 3646 Chandellers, commercial
 3645 Chandellers, residential
 3574 Change making machines
 2895 Channel black
 3446 Channels, furring
 2834 Chapticks

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STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|---|------|--|
| 2819 | Charcoal, activated | 2819 | Chemicals, laboratory : inorganic |
| 2861 | Charcoal, except activated | 2833 | Chemicals, medicinal : organic and inorganic—bulk, uncompounded |
| 3629 | Chargers (battery), rectifying or nonrectifying | 3861 | Chemicals, prepared photographic : not made in chemical plants |
| 2061 | Charlotte Russe (bakery product) | 2271 | Chenille rugs |
| 2782 | Chart and graph paper, ruled | 2211 | Chenilles, tufted textile : <i>mitac</i> |
| 3545 | Chasers (machine tool accessories) | 2035 | Cherries, brined |
| 3555 | Chases and galleys, printers' | 2033 | Cherries, maraschino |
| 3479 | Chasing on metals for the trade, for purposes other than printing | 3536 | Cherry pickers (elevated work platforms) |
| 3792 | Chassis for travel and camping trailers | 3944 | Chessmen and chessboards |
| 3799 | Chassis, automobile trailer : except house trailer | 2861 | Chestnut extract |
| 3711 | Chassis, motor vehicle | 2441 | Chests for tools, etc. : wood |
| 3469 | Chassis, radio and television : stamped | 2511 | Chests, cedar |
| 2352 | Chauffeurs' hats and caps, cloth | 3499 | Chests, fire or burglary resistive : steel |
| 3579 | Check protectors (machines) | 3499 | Chests, money : steel |
| 3579 | Check writing, endorsing, or signing machines | 3999 | Chests, musical |
| 3172 | Checkbook covers, regardless of material | 3499 | Chests, safe deposit : iron and steel |
| 2782 | Checkbooks | 2511 | Chests, silverware : wood (floor standing) |
| 3944 | Checkers and checkerboards | 2211 | Cheviots, cotton |
| 2399 | Cheese bandages, <i>mjpm</i> | 2065 | Chewing candy (not chewing gum) |
| 2311 | Cheese bandages, <i>mitac</i> | 2067 | Chewing gum |
| 3551 | Cheese making machinery | 2067 | Chewing gum base |
| 2022 | Cheese spreads, pastes, and cheese-like preparations | 3551 | Chewing gum machinery |
| 2022 | Cheese, all types and varieties except cottage cheese | 2131 | Chewing tobacco |
| 2026 | Cheese, cottage | 3523 | Chicken brooders |
| 2022 | Cheese, natural | 2032 | Chicken broth and soup, canned |
| 2022 | Cheese, processed | 2449 | Chicken coops (crates), wood : wirebound for shipping poultry |
| 2211 | Cheesecloth | 2452 | Chicken coops, prefabricated : for housing poultry |
| 2819 | Chemical catalysts | 3523 | Chicken feeders |
| 2899 | Chemical cotton (processed cotton linters) | 2048 | Chicken feeds, prepared |
| 3542 | Chemical explosives metal forming machines | 2017 | Chicken, canned : solid pack, deviled, and potted— <i>mjpm</i> |
| 3811 | Chemical fume hoods | 2016 | Chickens : slaughtering, dressing, and packing for the wholesale trade |
| 2865 | Chemical indicators | 2099 | Chicory root, dried |
| 3559 | Chemical kilns | 2511 | Chiffoniers and chifforobes |
| 3811 | Chemical laboratory apparatus | 2032 | Chili con carne, canned |
| 3559 | Chemical machinery and equipment | 2099 | Chili pepper or powder |
| 3599 | Chemical milling job shops | 2033 | Chili sauce, tomato |
| 3541 | Chemical milling machines | 3931 | Chimes and parts (musical instruments) |
| 3269 | Chemical porcelain | 3699 | Chimes, electric |
| 3812 | Chemical recovery coke oven products | 3251 | Chimney blocks, radial : clay |
| 3269 | Chemical stoneware (pottery products) | 3272 | Chimney caps, concrete |
| 2899 | Chemical supplies for foundries | 3259 | Chimney pipe and tops, clay |
| 2869 | Chemical warfare gases | 3229 | Chimneys, lamp : glass—pressed or blown |
| 3483 | Chemical warfare projectiles and components | 2511 | China closets |
| | | 3262 | China cooking ware |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3269 China firing and decorating, for the trade
 3262 China tableware, commercial and household: vitreous
 2632 Chinese foods, canned
 2211 Chintz, cotton
 2631 Chip board, *mitse*
 2645 Chip board, pasted: *mjpm*
 3531 Chip spreaders, self-propelled
 2421 Chipper mills
 3546 Chipping hammers, electric
 3423 Chisels
 2369 Chloral
 3069 Chlorinated rubbers, natural
 2822 Chlorinated rubbers, synthetic
 2869 Chlorinated solvents
 2834 Chlorination tablets and kits (water purification)
 2842 Chlorine bleaching compounds, household: liquid or dry
 2812 Chlorine, compressed or liquefied
 2869 Chloroacetic acid and metallic salts
 2865 Chlorobenzene
 2869 Chloroform
 2865 Chloronaphthalene
 2865 Chlorophenol
 2869 Chloropicrin
 2822 Chloroprene type rubbers
 2822 Chlorosulfonated polyethylenes
 2819 Chlorosulfonic acid
 2865 Chlorotolene
 3589 Chock assemblies
 2666 Chocolate bars
 2665 Chocolate candy, except solid chocolate
 2666 Chocolate coatings and sirups, made in chocolate plants
 2666 Chocolate liquor
 2026 Chocolate milk
 3551 Chocolate processing machinery
 2699 Chocolate sirup, *mjpm*
 2099 Chocolate, instant: *mjpm*
 2666 Chocolate, sweetened or unsweetened
 3714 Choker rods, motor vehicle
 2032 Chop suey, canned
 3551 Choppers, food: commercial types
 2032 Chow mein, canned
 2091 Chowder, clam: canned
 2771 Christmas cards, except hand painted
 **** Christmas cards, seals, and tags: hand painted—see nonmanufacturing
 3699 Christmas tree lighting sets, electric
 3999 Christmas tree ornaments, except electrical and glass
 3229 Christmas tree ornaments, from glass: *mitse*
 3231 Christmas tree ornaments, made from purchased glass
 3962 Christmas trees, artificial
 2819 Chromates and bichromates
 3832 Chromatographic equipment (laboratory type)
 3823 Chromatographs, industrial process type
 2816 Chrome pigments: chrome green, chrome yellow, chrome orange, zinc yellow
 2819 Chromic acid
 2819 Chromium compounds, inorganic
 3471 Chromium plating of metals and formed products, for the trade
 3339 Chromium refining, primary
 2819 Chromium salts
 3873 Chronographs, spring wound
 3829 Chronometers, electronic
 3873 Chronometers, spring wound
 3832 Chronoscopes
 3541 Chucking machines, automatic
 3546 Chucks: drill, lathe, and magnetic (machine tool accessories)
 3272 Church furniture, concrete
 2531 Church furniture, except stone or concrete
 3281 Church furniture: altars, fonts, communion tables, pulpits, etc.—cut stone
 3443 Chutes, metal plate
 2099 Cider
 3551 Cider presses
 3999 Cigar and cigarette holders
 2441 Cigar boxes, wood and part wood
 3172 Cigar cases, of all materials except precious metal
 3911 Cigar cases, precious metal
 3634 Cigar lighters, electric
 3999 Cigar lighters, except precious metal and electric
 3911 Cigar lighters, precious metal
 3559 Cigarette and cigar making machines
 3172 Cigarette cases, of all materials except precious metal
 3911 Cigarette cases, precious metal
 3999 Cigarette filters, not made in chemical plants
 3069 Cigarette holder mouthpieces, molded rubber
 3999 Cigarette lighter flints
 3634 Cigarette lighters, electric

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| 3999 Cigarette lighters, except precious metal and electric | 2044 Cleaning and polishing of rice |
| 3911 Cigarette lighters, precious metal | 2842 Cleaning and polishing preparations |
| 2821 Cigarette paper, <i>mâtes</i> | 3682 Cleaning equipment, ultrasonic |
| 2823 Cigarette tow, cellulosic fiber | 3547 Cleaning lines, electrolytic (rolling mill equipment) |
| 3111 Cigarettes | 3532 Cleaning machinery, mineral |
| 3121 Cigarillos | 3528 Cleaning machines for fruits, grains, and vegetables |
| 2121 Cigars | 2621 Cleansing tissue stock |
| 2833 Cinchona and derivatives | 2647 Cleansing tissues, <i>m/psm</i> |
| 3271 Cinder block, concrete | 3647 Clearance lamps and reflectors, motor vehicle |
| 3882 Cinetheodolites | 3264 Cleats, porcelain |
| 3679 Circuit boards, television and radar: electric—printed | 3421 Cleavers |
| 3618 Circuit breakers, air: with interrupting ratings of over 10,000 amperes | 2389 Clergymen's vestments |
| 3613 Circuit breakers, power | 2449 Climax baskets |
| 2257 Circular knit fabrics of all materials | 3811 Clinical laboratory instruments, except medical and dental |
| 2752 Circulars, lithographed | 2499 Clip boards, wood |
| 2754 Circulars: gravure printing | 3229 Clip cups, glass |
| 2751 Circulars: letterpress and screen printing | 3421 Clippers, fingernail and toenail |
| 2869 Citral | 3523 Clippers, hair: for animal use—hand and electric |
| 2869 Citrates | 3999 Clippers, hair: for human use—hand and electric |
| 2869 Citric acid | 3496 Clips and fasteners, made from purchased wire |
| 2899 Citronella oil | 3484 Clips, gun: 30 mm. (or 1.18 inch) and below |
| 2869 Citronellal | 3069 Cloaks, vulcanized rubber and rubberized fabric: <i>mâtes</i> |
| 2048 Citrus seed meal | 3873 Clock materials and parts, except crystals and jewels |
| 2091 Clam bouillon, broth, chowder, juice: bottled or canned | 3495 Clock springs, precision: made from purchased wire |
| 3429 Clamps, hose | 3873 Clocks, assembling of |
| 3429 Clamps, metal | 3873 Clocks, including electric |
| 3341 Clamps, surgical | 3261 Closet bowls, vitreous china |
| 3532 Clarifying machinery, mineral | 3079 Closures, plastics |
| 3931 Clarinets and parts | 2641 Cloth lined paper, <i>m/psm</i> |
| 3131 Clasps, shoe | 2269 Cloth mending, except wool: for the trade |
| 3532 Classifiers (metallurgical and mining machinery) | 3552 Cloth spreading machines |
| 2631 Clay coated board, <i>mâtes</i> | 2499 Cloth winding reels, wood |
| 3295 Clay for petroleum refining chemically processed | 3291 Cloth, abrasive |
| 3559 Clay working and tempering machines | 3292 Cloth, asbestos |
| 3295 Clay, ground or otherwise treated | 2257 Cloth, circular knit: <i>mâtes</i> |
| 3952 Clay, modeling | 3861 Cloth, photographic: sensitized—all types |
| 3714 Cleaners, air: motor vehicle | 3952 Cloth, tracing (drafting material) |
| 3599 Cleaners, boiler tube | 2295 Cloth, varnished glass |
| 3531 Cleaners, catch basin | 2258 Cloth, warp knit: <i>mâtes</i> |
| 2844 Cleaners, denture | |
| 3589 Cleaners, electric vacuum: industrial | |
| 3635 Cleaners, electric: vacuum—household | |
| 2851 Cleaners, paint brush | |
| 3999 Cleaners, pipe and cigarette holder | |
| 3471 Cleaning and descaling metal products, for the trade | |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2231 Cloth, wool: mending—for the trade
 3496 Cloth, woven wire: made from purchased wire
 2499 Clothes driers (clothes horses), wood
 3822 Clothes drier controls, including dryness controls
 2499 Clothes drying frames, wood
 3079 Clothes hangers, plastic
 2499 Clothes horses, wood
 2499 Clothes poles, wood
 3079 Clothespins, plastics
 2499 Clothespins, wood
 3942 Clothing, doll
 3699 Clothing, electrically heated
 3842 Clothing, fire resistant and protective
 2386 Clothing, leather and sheep-lined
 3069 Clothing, vulcanized rubber and rubberized fabric: *mitse*
 2385 Clothing, waterproof: *mjpm*
 2394 Cloths, drop: fabric—*mjpm*
 2842 Cloths, dusting and polishing: chemically treated
 2392 Cloths, lunch: *mjpm*
 2399 Cloths, saddle
 2514 Club room furniture, metal
 2511 Club room furniture, wood
 2499 Clubs, policemen's: wood
 3949 Clubs: golf, Indian, etc. (sporting goods)
 3292 Clutch facings, asbestos
 3568 Clutches, except vehicle
 **** Clutches, vehicle—classify by type of vehicle
 2643 Coal bags, *mjpm*
 3532 Coal breakers, cutters, and pulverizers
 3444 Coal chutes, prefabricated sheet metal
 3312 Coal gas, derived from chemical recovery coke ovens
 2865 Coal tar acids, derived from coal tar distillation
 3312 Coal tar crudes, derived from chemical recovery coke ovens
 2865 Coal tar crudes, derived from coal tar distillation
 2865 Coal tar distillates
 2865 Coal tar intermediates
 2951 Coal tar paving materials, not made in petroleum refineries
 2821 Coal tar resins
 3811 Coal testing apparatus
 3751 Coaster brakes, bicycle
 2363 Coat and legging sets: girls' and children's, *mjpm*
 3496 Coat hangers, made from purchased wire
 2396 Coat linings, fronts, and pads: for men's coats
 2371 Coat linings, fur
 2396 Coat trimmings fabric: *mjpm*
 2641 Coated paper (except photographic, carbon, and abrasive paper), *mjpm*
 3479 Coating (hot dipping) of metals and formed products, for the trade
 3554 Coating and finishing machinery, paper
 2295 Coating and impregnating of fabrics, except rubberizing
 3479 Coating and wrapping steel pipe
 2952 Coating compounds, tar
 3479 Coating of metals with silicon, for the trade
 3479 Coating of metals with plastics and resins, for the trade
 2851 Coating, air curing
 3479 Coating, rust preventive
 2066 Coatings, chocolate: made in chocolate plants
 2337 Coats, except fur and raincoats: women's, misses', and juniors'
 2371 Coats, fur
 2386 Coats, leather and sheep-lined
 2311 Coats, tailored: men's, youths', and boys'
 2363 Coats: girls', children's, and infants'—*mjpm*
 2329 Coats: oiled fabric, leatherette, blanket lined—men's, youths', and boys'
 3357 Coaxial cable, nonferrous
 2819 Cobalt chloride
 3339 Cobalt refining, primary
 2819 Cobalt sulfate
 2819 Cobalt 60 (radioactive)
 2833 Cocaine and derivatives
 3432 Cocks, drain
 2085 Cocktails (alcoholic beverages)
 2066 Cocoa butter
 2099 Cocoa, instant: *mjpm*
 2066 Cocoa, powdered: mixed with other substances—made in chocolate plants
 2076 Coconut oil
 2099 Coconut, desiccated and shredded
 2843 Cod oil, sulfonated
 3832 Coddington magnifying instruments
 2833 Codeine and derivatives
 2091 Codfish: smoked, salted, dried, and pickled
 2095 Coffee concentrates (instant coffee)
 2095 Coffee extracts
 2087 Coffee flavorings and sirups
 3634 Coffee makers, household: electric

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STANDARD INDUSTRIAL CLASSIFICATION

- 3551 Coffee roasting and grinding machines
 2095 Coffee roasting, except by wholesale gro-
 cers
 2043 Coffee substitutes, made from grain
 2511 Coffee tables, wood
 3589 Coffee urns, restaurant type
 2095 Coffee, instant and freeze-dried
 3549 Coil winding machines for springs
 3677 Coil windings, electronic
 3493 Colled flat springs
 3549 Collers (metalworking machines)
 3677 Coils, chokes and other electronic induc-
 tors
 3621 Coils, for motors and generators
 3694 Coils, ignition: automotive
 3493 Coils, pipe: fabricated from purchased
 pipe
 3354 Coils, rod: aluminum—extruded
 3353 Coils, sheet: aluminum
 3355 Coils, wire: aluminum—made in rolling
 mills
 3574 Coin counters
 3999 Coin-operated amusement machines, ex-
 cept phonographs
 3172 Coin purses, regardless of material
 3579 Coin wrapping machines
 3581 Coin-operated merchandise vending ma-
 chines
 3651 Coin-operated phonographs
 2299 Coir yarns and roving
 2999 Coke, petroleum: not produced in petro-
 leum refineries
 2911 Coke, petroleum: produced in petroleum
 refineries
 3312 Coke, produced in beehive ovens
 3312 Coke, produced in chemical recovery coke
 ovens
 3585 Cold drink dispensing equipment, except
 coin-operated
 3316 Cold finished steel bars: not made in hot
 rolling mills
 3547 Cold forming type mills (rolling mill ma-
 chinery)
 2834 Cold remedies
 3316 Cold rolled steel strip, sheet, and bars:
 not made in hot rolling mills
 3312 Cold rolled strip steel, flat bright: made
 in hot rolling mills
 2099 Cole slaw, in bulk
 3499 Collapsible tubes for viscous products
 2339 Collar and cuff sets, *m/ps*
 2253 Collar and cuff sets, *mtse*
 3963 Collar buttons, except precious metal and
 precious or semiprecious stones
 3911 Collar buttons, precious metal and pre-
 cious or semiprecious stones
 3111 Collar leather
 2396 Collar linings, for men's coats
 3545 Collars (machine tool accessories)
 3199 Collars and collar pads (harness)
 3199 Collars, dog
 2321 Collars, men's and youths': *m/ps*
 3563 Collars, shaft (power transmission equip-
 ment)
 3579 Collating machines, for store or office use
 3621 Collector rings, for motors and generators
 3545 Collets (machine tool accessories)
 2844 Colognes
 2752 Color cards, paint: offset printing
 2365 Color lakes and toners
 2752 Color lithography
 2816 Color pigments, inorganic
 2865 Color pigments, organic: except animal
 black and bone black
 2754 Color printing: gravure
 2751 Color printing: letterpress and screen
 3632 Colorimeters (optical instruments)
 3471 Coloring and finishing of aluminum and
 formed products, for the trade
 3111 Coloring of leather
 2087 Colorings, food: except synthetic
 2087 Colors for bakers' and confectioners'
 use, except synthetic
 2851 Colors in oil, except artists'
 3952 Colors, artists': water, oxide ceramic
 glass
 2865 Colors, dry: lakes, toners, or full strength
 organic colors
 2865 Colors, extended (color lakes)
 2865 Colors, food: synthetic
 3842 Colostomy appliances
 3339 Columbium refining, primary
 3599 Column clamps and shores
 3272 Columns, concrete
 3443 Columns, fractionating: metal plate
 3299 Columns, papier mache or plaster of paris
 3172 Comb cases, of all materials except
 precious metal
 3999 Comb mountings, except precious metal
 3731 Combat ships, building and repairing
 2231 Combed yarn, cotton
 3823 Combination limit and fan controls
 3822 Combination oil and hydronic controls
 3523 Combines (harvester-threshers), self-
 propelled and pull
 2299 Combing and converting top
 3552 Combing machines, textile
 3999 Combs, except hard rubber

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3869 Combs, hard rubber
 3823 Combustion control instruments, except commercial and household furnace type
 2392 Comforters or comfortables—*m/ym*
 2721 Comic books: publishing and printing, or publishing only
 3363 Commercial earthenware, semivitreous
 3646 Commercial lighting fixtures
 2711 Commercial printing and newspaper publishing combined
 2752 Commercial printing, lithographic
 2752 Commercial printing, offset
 2754 Commercial printing: gravure
 2751 Commercial printing: letterpress and screen printing
 3363 Commercial tableware and kitchen articles, fine earthenware
 3362 Commercial tableware and kitchen articles, vitreous china
 3469 Commercial utensils, stamped and pressed metal: except cast aluminum
 2511 Commodities
 3662 Communication equipment and parts, electronic: except telephone, telegraph
 3461 Communication equipment and parts, telephone and telegraph
 3662 Communication equipment, mobile and micro-wave
 3661 Communication headgear, telephone
 3357 Communication wire and cable, non-ferrous
 3281 Communion tables, cut stone
 2531 Communion tables, wood
 2052 Communion wafers
 3621 Commutators, electric motor
 3679 Commutators, electronic
 3569 Compactors (packaging machinery)
 3531 Compactors, soil: vibratory-pan and vibratory-roller types
 3961 Compacts, except precious metal and solid leather
 3911 Compacts, precious metal
 3172 Compacts, solid leather
 3545 Comparators (machinists' precision tools)
 3832 Comparators, optical
 3811 Compasses and accessories, except portable (navigational instruments)
 3829 Compasses, magnetic: portable type
 2951 Composition blocks for paving
 3979 Composition stone, plastics
 2791 Composition, hand: for the printing trade
 2791 Composition, machine: linotype, monotype, etc.—for the printing trade
 2875 Compost
 3843 Compounds, dental
 3585 Compressors for refrigeration equipment
 3563 Compressors, air and gas: for general industrial use
 3823 Computer interface equipment for industrial process control
 3674 Computer logic modules
 3573 Computers, gun data
 3573 Computing machines, electronic
 2987 Concentrates, drink: except frozen fruit juice
 2087 Concentrates, flavoring
 2037 Concentrates, frozen fruit juice
 2844 Concentrates, perfume
 3532 Concentration machinery (metallurgical and mining)
 3931 Concertinas and parts
 3546 Concrete and masonry drilling tools, power: portable
 3272 Concrete articulated mattresses for river revetment
 3531 Concrete buggies, powered
 2899 Concrete curing compounds (blends of pigments, waxes, and resins)
 3444 Concrete forms, sheet metal
 3531 Concrete grouting equipment
 3531 Concrete gunning equipment
 2899 Concrete hardening compounds
 3273 Concrete mixed in transit
 3531 Concrete mixers and finishing machinery
 3531 Concrete plants
 3272 Concrete products, precast: except block and brick
 3496 Concrete reinforcing mesh, made from purchased wire
 3449 Concrete reinforcing steel bars, fabricated
 2951 Concrete, asphaltic: not made in petroleum refineries
 2951 Concrete, bituminous
 3272 Concrete, dry mixture
 2821 Condensation plastics
 2023 Condensed and evaporated milk
 3551 Condensed and evaporated milk machinery
 3443 Condenser boxes, metal plate

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STANDARD INDUSTRIAL CLASSIFICATION

- 2641 Condenser paper, *mfp*
 2621 Condenser paper, *mitse*
 3629 Condensers for motors and generators
 3443 Condensers, barometric
 3629 Condensers, except electronic: fixed and variable
 3675 Condensers, for electronic end products
 3443 Condensers, steam
 3621 Condensers, synchronous: electric
 3643 Conductor connectors, solderless connectors, sleeves, or soldering lugs
 3259 Conduit, vitrified clay
 3617 Conduit: welded, lock joint, and heavy riveted—*mfp*
 3644 Conduits and fittings, electrical
 3292 Conduits, asbestos cement
 3272 Conduits, concrete
 2646 Conduits, fiber (pressed pulp): *mfp*
 2655 Cones, fiber: for winding yarn, string, ribbons, or cloth: *mfp*
 2052 Cones, ice cream
 3269 Cones, pyrometric: earthenware
 2087 Confectioners' colors, except synthetic
 2065 Confectionery
 3551 Confectionery machinery
 2649 Confetti, *mfp*
 3714 Connecting rods, motor vehicle engine
 3643 Connectors and terminals for electrical devices
 3643 Connectors, conductor: solderless connectors, sleeves, or soldering
 3643 Connectors, electric cord
 3678 Connectors, for electronic applications
 3613 Connectors, power
 3643 Connectors, solderless (wiring devices)
 2511 Console tables, wood
 3679 Constant impedance transformers
 3531 Construction machinery, except mining
 2661 Construction paper, *mitse*
 3851 Contact lenses
 3643 Contacts, electrical: except carbon and graphite
 2631 Container board, *mitse*
 2449 Containers except boxes, veneer and plywood
 3221 Containers for packing, bottling, and canning: glass
 2449 Containers made of staves
 3497 Containers, foil: for bakery goods and frozen foods
 2654 Containers, food: liquid tight, sanitary—*mfp*
 2655 Containers, laminated phenolic and vulcanized fiber: *mfp*
 2655 Containers, liquid tight fiber (except sanitary food containers): *mfp*
 3411 Containers, metal: food, milk, oil, beer, general line
 3079 Containers, plastics: except bags
 3412 Containers, shipping: barrels, kegs, drums, packages—liquid tight (metal)
 3443 Containers, shipping: metal plate (bombs, etc.)—except missile casings
 2761 Continuous forms, office and business: carbonized or multiple reproduction
 3832 Contour projectors
 3621 Control equipment for buses and trucks
 3622 Control equipment, electric
 3714 Control equipment, motor vehicle: acceleration mechanisms, governors, etc.
 3613 Control panels, electric
 3662 Control receivers
 3559 Control rod drive mechanisms, for use on nuclear reactors
 3612 Control transformers
 3494 Control valves, automatic
 3494 Control valves, steering: for ships
 3674 Controlled rectifiers, solid state
 3823 Controllers for process variables: electric, electronic, and pneumatic
 3622 Controls and control accessories, industrial: electric and electronic
 3519 Controls, remote: for boats
 3622 Controls, resistance welder
 3824 Controls, revolution and timing instruments
 3728 Controls: hydraulic and pneumatic, aircraft
 3643 Convenience outlets, electric
 3573 Converters, digital and analog: except instrumentation type
 3621 Converters, frequency (electric generators)
 3111 Converters, leather
 3621 Converters, phase and rotary (electrical equipment)
 3041 Conveyor belting, rubber
 3496 Conveyor belts, made from purchased wire
 3535 Conveyor systems and equipment for general industrial use
 3523 Conveyors, farm (agricultural machinery)
 3361 Cookers, pressure: domestic—cast aluminum

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3469 Cookers, pressure: stamped or drawn
 3589 Cookers, steam: restaurant type
 2052 Cookies
 3634 Cooking appliances, household: electric
 3589 Cooking equipment, commercial
 3631 Cooking equipment, household
 2079 Cooking oils, vegetable: except corn oil—refined
 3361 Cooking utensils, cast aluminum
 3321 Cooking utensils, cast iron
 3229 Cooking utensils, glass and glass ceramic
 3262 Cooking ware, china
 3263 Cooking ware, fine earthenware
 3469 Cooking ware, porcelain enameled
 3269 Cooking ware: stoneware, coarse earthenware, and pottery
 3585 Coolers, milk and water: electric
 3724 Cooling systems, aircraft engine
 3443 Cooling towers, metal plate
 3444 Cooling towers, sheet metal
 2499 Cooling towers, wood or wood and sheet metal combination
 2449 Cooperage
 2429 Cooperage stock mills
 2429 Cooperage stock: staves, heading, and hoops—sawed or split
 3259 Coping, wall: clay
 3272 Copings, concrete
 2822 Copolymers: butadiene-styrene, butadiene-acrylonitrile, over 50% butadiene
 3362 Copper and copper base alloy castings and die castings
 3362 Copper and copper base alloy foundries
 2879 Copper arsenate, formulated
 2819 Copper chloride
 3497 Copper foil, not made in rolling mills
 3331 Copper ingots and refinery bars, primary
 2819 Copper iodide and oxide
 3351 Copper rolling, drawing, and extruding
 3331 Copper smelting and refining, primary
 3341 Copper smelting and refining, secondary
 2819 Copper sulfate
 **** Coppersmithing, repair only (other than construction)—see nonmanufacturing
 3555 Copy holders, printers'
 3643 Cord connectors, electric
 2296 Cord for reinforcing rubber tires, industrial belting, and fuel cells
 3292 Cord, asbestos
 2298 Cord, braided
 3552 Cordage and rope machines
 2281 Cordage yarn, cotton
 2298 Cordage: abaca (manilla), sisal, henequen, hemp, jute, and other fibers
 2892 Cordeau detonant (explosive)
 2085 Cordials, alcoholic
 2087 Cordials, nonalcoholic
 2892 Cordite (explosive)
 2241 Cords, fabric
 3699 Cords: electric iron, lamp, etc.—made from purchased insulated wire
 2211 Corduroys, cotton
 3567 Core baking and mold drying ovens
 3532 Core drills
 2899 Core oil and binders
 2899 Core wash
 2899 Core wax
 3482 Cores, bullet: 80 mm. (or 1.18 inch) and below
 2655 Cores, fiber (metal end or all fiber): *mfp*
 3679 Cores, magnetic
 3565 Cores, sand (foundry)
 3714 Cores, tire valve
 2499 Cork products
 3559 Cork working machinery
 2499 Corks, bottle
 2099 Corn chips
 2452 Corn cribs, prefabricated: wood
 2043 Corn flakes
 2041 Corn grits and flakes, for brewers' use
 3523 Corn heads for combines
 3423 Corn knives
 2041 Corn meal and flour
 2046 Corn oil cake and meal
 2046 Corn oil, crude and refined
 3523 Corn pickers and shellers
 3634 Corn poppers, electric
 3551 Corn popping machines, commercial type
 3842 Corn remover pads, bunion pads, etc.
 2046 Corn sirup, dried
 2046 Corn sirup, unmixed
 2046 Corn starch
 2046 Corn sugar
 2043 Corn, hulled (cereal breakfast food)
 3251 Corncrib tile
 3841 Corneal microscopes
 2013 Corned beef
 2013 Corned meats, *mfp*
 3199 Corners, luggage: leather
 3931 Cornets and parts
 3444 Cornices, sheet metal
 2431 Cornices, wood
 3832 Correctors: percentage, wind, roll (sighting and fire control equipment)

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STANDARD INDUSTRIAL CLASSIFICATION

- 2648 Correspondence-type tablets, *m/psm*
 2899 Corrosion preventive lubricant, synthetic base: for jet engines
 2649 Corrugated paper, *m/psm*
 3316 Corrugating iron and steel, cold rolled: not made in hot rolling mills
 3554 Corrugating machines for paper
 2343 Corselets, *m/psm*
 2343 Corset accessories: clasps, stays, etc.
 2211 Corset fabrics, cotton
 2241 Corset laces
 2342 Corsets and allied garments, except surgical: *m/psm*
 3342 Corsets, surgical
 3291 Corundum abrasives
 3173 Cosmetic bags, regardless of material
 2344 Cosmetic creams
 2365 Cosmetic dyes, synthetic
 3321 Cosmetic jars, glass
 2344 Cosmetic lotions and oils
 3343 Cosmetic restorations
 2344 Cosmetics
 3361 Costume jewelry, except precious metal and precious or semiprecious stones
 2542 Costumers, office and store: metal
 2541 Costumers, office and store: wood
 2339 Costumes: lodge, masquerade, theatrical, etc.
 2515 Cot springs, assembled
 3069 Cots, finger: rubber
 2514 Cots, household: metal
 2511 Cots, household: wood
 2026 Cottage cheese, including pot, bakers', and farmers' cheese
 2391 Cottage sets (curtains), *m/psm*
 3452 Cotter pins
 3523 Cotton balers and presses
 2261 Cotton broad woven fabric finishing
 2211 Cotton broad woven goods
 3559 Cotton ginning machinery
 2241 Cotton narrow fabrics
 3523 Cotton pickers and strippers (harvesting machinery)
 2234 Cotton thread
 2231 Cotton yarn, spinning
 3342 Cotton, absorbent: sterilized
 3342 Cotton, including cotton balls, sterile and nonsterile
 2211 Cottonades
 2074 Cottonseed oil, cake, and meal: made in cottonseed oil mills
 2079 Cottonseed oil, refined: not made in cottonseed oil mills
 2515 Couch springs, assembled
 2515 Couches, studio: on frames of any material
 2512 Couches, upholstered on wood frames
 2065 Cough drops, except pharmaceutical preparations
 2334 Cough medicines
 3332 Coulometric analyzers, except industrial process type
 3323 Coulometric analyzers, industrial process type
 2369 Coumarin
 2321 Coumarone-indene resins
 3329 Count rate meters, nuclear radiation
 3324 Counter type registers
 3423 Counterbores and countersinking bits, woodworking
 3545 Counterbores, metalworking
 3728 Countermeasure dispensers, aircraft
 3662 Countermeasure simulators, electric
 3131 Counters (shoe cut stock)
 2542 Counters and counter display cases, except refrigerated: metal
 2541 Counters and counter display cases, except refrigerated: wood
 3535 Counters and counter display cases, refrigerated
 3324 Counters, revolution
 3324 Counters: mechanical, electrical, electronic totalizing
 3541 Countersinking machines
 3423 Countersinks
 3545 Countersinks and countersink drill combinations (machine tool accessories)
 3429 Couplings, hose
 3494 Couplings, pipe: except pressure and soil pipe
 3498 Couplings, pipe: fabricated from purchased pipe
 3321 Couplings, pipe: pressure and soil pipe—cast iron
 3568 Couplings, shaft: rigid, flexible, universal joint, etc.
 2752 Coupons, lithographing of
 2754 Coupons: gravure printing
 2751 Coupons: letterpress and screen printing
 2211 Coutil, cotton
 2621 Cover paper, *misc*
 2323 Coveralls, except waterproof
 3443 Covers, annealing
 2399 Covers, automobile tire and seat: *m/psm*
 2499 Covers, bottle and demijohn: willow, rat-tan, and reed

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3272 Covers, catch basin : concrete
 2394 Covers, fabric : *mfgm*
 3443 Covers, floating : metal plate
 2292 Covers : chair, dresser, piano, and table—lace
 2211 Coverts, cotton
 3444 Cowls or scoops, air (ship ventilators) : sheet metal
 3732 Crab boats, building and repairing
 2092 Crab meat picking
 2091 Crab meat, canned and preserved
 2092 Crab meat, fresh : packed in nonsealed containers
 3429 Crab traps, steel : except wire
 3551 Cracker making machines
 2052 Cracker meal and crumbs
 2052 Crackers : graham, soda, etc.
 3549 Cradle assemblies (wire making equipment)
 2511 Cradles, wood
 3944 Craft and hobby kits and sets
 3531 Crane carriers
 3443 Crane hooks, laminated plate
 3531 Cranes, except industrial plant
 3536 Cranes, industrial plant
 3531 Cranes, locomotive
 3536 Cranes, overhead travel
 3531 Cranes, ship
 3714 Crankshaft assemblies, motor vehicle
 3541 Crankshaft regrinding machines
 3599 Crankshafts and camshafts, machining
 3462 Crankshafts, forged steel : not made in rolling mills
 2211 Crash toweling, cotton
 2299 Crash, linen
 2449 Crates : berry, butter, fruit, and vegetable—wood, wirebound
 3952 Crayons : chalk, gypsum, charcoal, fusains, pastel, and wax
 2869 Cream of tartar
 3523 Cream separators (agricultural equipment)
 3551 Cream separators (food products machinery)
 2023 Cream substitutes
 2026 Cream, aerated
 2026 Cream, bottled
 2026 Cream, plastic
 2026 Cream, sour
 2023 Cream : dried, powdered, and canned
 2021 Creamery butter
 2844 Creams, cosmetic
 2844 Creams, shaving
 3949 Creels, fish
 3552 Creels, textile machinery
 3569 Cremating ovens
 2865 Creosote oil, product of coal tar distillation
 2861 Creosote, wood
 2951 Creosoted wood paving blocks
 2491 Creosoting of wood
 2649 Crepe paper and crepe paper products, *mfgm*
 2221 Crepe satins
 2211 Crepes, cotton
 **** Cresines-code according to material from which made
 2821 Cresol resins
 2821 Cresol-furfural resins
 2865 Cresols, product of coal tar distillation
 2865 Cresylic acid, product of coal tar distillation
 2211 Cretonne, cotton
 2252 Crew socks
 3272 Cribbing, concrete
 2514 Cribs, metal
 2511 Cribs, wood
 3949 Cricket equipment
 2211 Crinoline
 2411 Croches, wood
 2284 Crochet thread : cotton, silk, and man-made fiber
 2395 Crochet ware, machine-made
 2281 Crochet yarn : cotton, silk, and man-made staple
 2283 Crochet yarn : wool, mohair, or similar animal fiber
 3269 Crockery
 3523 Crop driers
 3199 Crops, riding
 3949 Croquet sets
 3272 Crossing slabs, concrete
 2411 Crossties, hewn
 2421 Crossties, sawed
 2491 Crossties, treated
 3466 Crowns, jar : stamped metal
 3255 Crucibles, fire clay
 3297 Crucibles : graphite, magnesite, chrome, silica, or other nonclay materials
 2051 Crullers
 3523 Crushers, feed (agricultural machinery)
 3569 Crushers, ice, (machinery)
 3531 Crushers, portable
 3532 Crushers, stationary

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STANDARD INDUSTRIAL CLASSIFICATION

- 3842 Crutches and walkers
 3679 Cryogenic cooling devices (cryostats, etc.) for infra-red detectors, masers
 3559 Cryogenic machinery, industrial
 3443 Cryogenic tanks, for liquids and gases: metal plate
 2065 Crystallized fruits and fruit peel
 3679 Crystals and crystal assemblies, radio
 3231 Crystals, watch: made from purchased glass
 3613 Cubicles (electric switchboard equipment)
 3949 Cues and cue tips, billiard and pool
 3963 Cuff buttons, except precious metal and precious or semiprecious stones
 3911 Cuff buttons, precious metal and precious or semiprecious stones
 3429 Cuffs, leg: iron
 2369 Culottes, girls' and children's
 2339 Culottes: women's, misses', and juniors'
 3523 Cultivators (agricultural implements) field and row crop
 3524 Cultivators (garden tractor equipment)
 3069 Culture cups, rubber
 2831 Culture media or concentrates
 3272 Culvert pipe, concrete
 3443 Culverts, metal plate
 3444 Culverts, sheet metal
 2389 Cummerbunds
 3443 Cupolas, metal plate
 2823 Cuprammonium fibers
 2844 Cupranol
 3599 Cups, oil and grease: metal
 2654 Cups, paper: *mfp*m except those made from pressed or molded pulp
 3079 Cups, plastics, including foamed
 2646 Cups, pressed and molded pulp: *mfp*m
 3351 Cups, primer and cartridge: copper and copper alloy
 3281 Curbing, granite and stone
 2011 Cured meats, *miss*
 2013 Cured meats: brined, dried, and salted—*mfp*m
 3523 Curers, tobacco
 2899 Curing compounds, concrete (blends of pigments, waxes and resins)
 3999 Curlers, hair: designed for beauty parlors
 3964 Curlers, hair: except equipment designed for beauty parlor use
 3069 Curlers, hair: rubber
 3962 Curling feathers, for the trade
 3631 Curling irons, electric
 3999 Curls, artificial (hair)
 2753 Currency, engraving of
 3629 Current collector wheels, for trolley rigging
 3612 Current limiting reactors, electrical
 3625 Current measuring equipment
 3643 Current taps, attachment plug and screw shell types
 3111 Currying of leather
 2591 Curtain rods, poles, and fixtures
 2499 Curtain stretchers, wood
 3469 Curtain walls for buildings, steel
 3444 Curtain walls, sheet metal
 2292 Curtains and curtain fabrics, lace
 3999 Curtains, advertising
 2259 Curtains, made in knitting mills
 2392 Curtains, shower: *mfp*m
 2391 Curtains, window: *mfp*m
 2515 Cushion springs, assembled
 3952 Cushions and burnishers, gilders'
 2392 Cushions, except spring and carpet cushions
 2515 Cushions, spring
 2024 Custard, frozen
 3079 Custom compounding of purchased resins
 2421 Custom sawmills
 3231 Cut and engraved glassware, made from purchased glass
 3131 Cut stock for boots and shoes
 2421 Cut stock, softwood
 3281 Cut stone products for building, ornamental, paving, and other uses
 3421 Cutlery, except all metal
 3914 Cutlery: silver, nickel silver, stainless steel, and plated (all metal)
 3541 Cutoff machines (metalworking machinery)
 3993 Cutouts and displays, window and lobby
 3613 Cutouts, distribution
 2645 Cutouts, paper and paperboard: die cut from purchased material
 3643 Cutouts, switch and fuse
 3551 Cutters, biscuit (machines)
 3532 Cutters, coal
 3523 Cutters, ensilage
 3423 Cutters, glass
 3545 Cutters, milling
 3554 Cutting and folding machines, paper
 3544 Cutting dies, for cutting metal
 3544 Cutting dies, paper industry
 3423 Cutting dies: except metal cutting, biscuit cutting, and paper cutting
 3843 Cutting instruments, dental

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3541** Cutting machines, pipe (machine tools)
2645 Cutting of cards
3111 Cutting of leather
2992 Cutting oils, blending and compounding from purchased material
3545 Cutting tools and bits, for use on lathes, planers, shapers, etc.
3549 Cutting-up lines
3231 Cutware, made from purchased glass
2819 Cyanides
3944 Cycles, sidewalk: children's
2865 Cyclic crudes, coal tar: product of coal tar distillation
2865 Cyclic intermediates
2822 Cyclo rubbers, synthetic
3069 Cyclo rubbers, natural
2865 Cyclohexane
3443 Cyclones, industrial: metal plate
2869 Cyclopropane
2834 Cyclopropane for anesthetic use (U.S.P. par N.F.), package
3662 Cyclotrons
3714 Cylinder heads, motor vehicle
3272 Cylinder pipe, prestressed concrete
3272 Cylinder pipe, pretensioned concrete
3541 Cylinder reboring machines
3496 Cylinder wire cloth, made from purchased wire
3484 Cylinders and clips, gun: 30 mm. (or 1.18 inch) and below
3443 Cylinders, pressure: metal plate
3561 Cylinders, pump
3599 Cylinders: fluid power, hydraulic and pneumatic
3931 Cymbals and parts
3841 Cystoscopes
- D**
- 3551** Dairy products machinery and equipment
3441 Dam gates, metal plate
2211 Damasks, cotton
3822 Damper operators: pneumatic, thermostatic, electric
2284 Darning thread: cotton, silk, and man-made fiber
2281 Darning yarn: cotton, silk, and man-made staple
2283 Darning yarn: wool, mohair, or similar animal fiber
3573 Data computing and correcting systems, electronic
3823 Data loggers, industrial process type
3861 Data sets, telephone and telegraph
3953 Date stamps, hand: with rubber or metal type
2034 Dates, dried
2065 Dates: chocolate covered, sugared, and stuffed
3579 Dating devices and machines, except rubber stamps
2512 Davenport, upholstered on wood frames
3536 Davits
2879 DDT (insecticide), formulated
2869 DDT, technical
3728 De-icing equipment, aircraft
2899 De-icing fluid
3551 Deaerating equipment, for food and beverage processing
3541 Deburring machines
3825 Decade boxes: capacitance, inductance, and resistance
2869 Decahydronaphthalene
3269 Decalcomania work on china and glass, for the trade
3999 Decalcomania work, except on china or glass: for the trade
2752 Decalcomanias (dry transfers), lithographed
2751 Decalcomanias, screen printing
2789 Deckling books, cards, and paper
3471 Decontaminating and cleaning of missile and satellite parts for the trade
3231 Decorated glassware: chipped, engraved, etched, sandblasted, etc.—*m/fpm*
3269 Decorating china, for the trade
3648 Decorative area lighting fixtures, except residential
3271 Decorative block, concrete: split, slump, shadowal
3229 Decorative glassware
3471 Decorative plating and finishing of formed products, for the trade
2395 Decorative stitching, for the trade
******** Decortication of hemp—see nonmanufacturing
3949 Decoys, duck and other game birds
3634 Deep fat fryers, household: electric
3693 Defibrillator
2874 Defluorinated phosphate
2879 Defoliants
3714 Defrosters, motor vehicle
2899 Defrosting fluid
3811 Degaussing equipment
3549 Degreasing machines, automotive (garage equipment)
3559 Degreasing machines, industrial

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STANDARD INDUSTRIAL CLASSIFICATION

- 2842 Degreasing solvent
 3585 Dehumidifiers, except room: electric
 3634 Dehumidifiers: room, electric
 2034 Dehydrated fruits, vegetables, and soups
 3551 Dehydrating equipment, food processing
 3679 Delay lines
 3496 Delivery cases, made from purchased wire
 3825 Demand meters, electric
 2499 Demijohn covers: willow, rattan, and reed
 3715 Demountable cargo containers
 2869 Denatured alcohol, industrial (nonbeverage)
 2211 Denims
 3861 Densitometers
 3823 Density and specific gravity instruments, industrial process type
 3843 Dental alloys for amalgams
 3843 Dental chairs
 3843 Dental engines
 3843 Dental equipment and supplies
 3843 Dental laboratory equipment
 3843 Dental metal
 2844 Dentifrices
 2844 Denture cleaners
 3843 Denture materials
 2842 Deodorants, nonpersonal
 2844 Deodorants, personal
 2844 Depilatories (cosmetic)
 3471 Depolishing metal, for the trade
 3842 Depressors, tongue
 3489 Depth charge release pistols and projectors
 3483 Depth charges and parts (ordnance)
 3531 Derricks, except oil and gas field
 3533 Derricks, oil and gas field
 3531 Derricks, ship
 3559 Desalination equipment
 2899 Desalter kits, sea water
 3295 Desiccants, activated: clay
 2819 Desiccants, activated: silica gel
 3634 Desk fans, electric
 3645 Desk lamps, residential
 3999 Desk pads, except paper
 2648 Desk pads, paper: *m/psm*
 3281 Desk set bases, onyx
 3199 Desk sets, leather.
 2511 Desks, household: wood
 2522 Desks, office: metal
 2521 Desks, office: wood
 2024 Desserts, frozen
 2099 Desserts, ready-to-mix
 3731 Destroyer tenders, building and repairing
 3663 Detection apparatus: electronic and magnetic field, and light and heat
 3674 Detectors, nuclear: solid state
 3829 Detectors, scintillation
 2841 Detergents, synthetic organic and inorganic alkaline
 3341 Detinning of cans
 3341 Detinning of scrap
 2892 Detonating caps for safety fuses
 2892 Detonators (explosive compounds)
 3483 Detonators for ammunition over 30 mm. (or over 1.18 inch)
 3483 Detonators: mine, bomb, depth charge, and chemical warfare projectile
 3861 Developers, prepared photographic: not made in chemical plants
 3361 Developing machines and equipment, still or motion picture
 2046 Dextrine
 2899 Dextrine sizes
 2046 Dextrose
 2834 Dextrose and sodium chloride injection, mixed
 2834 Dextrose injection
 2831 Diagnostic agents, biological
 3841 Diagnostic apparatus, physicians'
 3643 Dial light sockets, radio
 2874 Diammonium phosphates
 3496 Diamond cloth, made from purchased wire
 3915 Diamond cutting and polishing
 3545 Diamond cutting tools for turning, boring, burnishing, etc.
 3544 Diamond dies, metalworking
 3545 Diamond dressing and wheel crushing attachments
 3291 Diamond dressing wheels
 3915 Diamond points for phonograph needles
 3291 Diamond powder
 2385 Diaper covers, waterproof: except vulcanized rubber
 2211 Diaper fabrics
 2399 Diapers, except disposable: *m/psm*
 2647 Diapers, paper: *m/psm*
 2782 Diaries
 3693 Diathermy unit
 3295 Diatomaceous earth, ground or otherwise treated
 3861 Diazo (whiteprint) paper and cloth, sensitized
 3861 Diazotype (whiteprint) reproduction machines and equipment

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3944 Dice and dice cups
 2869 Dichlorodifluoromethane
 2819 Dichromates
 2339 Dickeys
 3579 Dictating machines, office types
 2821 Dicyandiamine resins
 3559 Die and hub cutting equipment (jewelry manufacturing)
 3537 Die and strip handlers
 3542 Die casting machines
 3361 Die castings, aluminum and aluminum base
 3369 Die castings, nonferrous metal except aluminum, copper, and copper alloys
 3362 Die castings: brass, bronze, copper, and copper base alloy
 2645 Die-cut paper and paperboard, *m/fpm*
 3554 Die cutting and stamping machinery (paper converting machinery)
 3111 Die cutting of leather
 3544 Die sets for metal stamping (presses)
 3541 Die sinking machines
 3544 Die springs
 3567 Dielectric heating equipment
 3953 Dies (hand seals)
 3544 Dies and die holders for metal cutting, forming, die casting, etc.
 3551 Dies, biscuit cutting
 3423 Dies, cutting: except biscuit cutting, paper cutting, and metal cutting
 3544 Dies, diamond
 3544 Dies, paper cutting
 3544 Dies, plastics forming
 3544 Dies, steel rule
 3545 Dies, thread cutting
 3519 Diesel and semi-diesel engines: for stationary, marine, traction, etc.
 2869 Diethylcyclohexane (mixed isomers)
 2869 Diethylene glycol ether
 3823 Differential pressure instruments, industrial process type
 3714 Differentials and parts, motor vehicle
 3443 Digesters, process: metal plate
 3573 Digital computers
 3823 Digital displays of process variables
 3662 Digital encoders
 3825 Digital panel meters, electricity measuring
 3825 Digital test equipment, electronic and electrical circuits and equipment
 3825 Digital-to-analog converters, electronic instrumentation type
 2834 Digitals pharmaceutical preparations
 2833 Digitoxin
 2821 Diisocyanate resins
 3281 Dimension stone for buildings
 2426 Dimension, hardwood
 2869 Dimethyl divinyl acetylene (*di*-isopropenyl acetylene)
 2869 Dimethylhydrazine, unsymmetrical
 2211 Dimitties
 2514 Dinette sets, metal
 3732 Dinghies, building and repairing
 3743 Dining cars and car equipment
 2511 Dining room furniture, wood
 2038 Dinners, frozen: packaged
 3079 Dinnerware, plastics
 3825 Diode and transistor testers
 3674 Diodes, solid state (germanium, silicon, etc.)
 2865 Diphenylamine
 2831 Diphtheria toxin
 3469 Dippers, ice cream
 3479 Dipping metal in plastic solution as a preservative, for the trade
 2879 Dips, cattle and sheep
 3663 Direction finders, radio
 3714 Directional signals, motor vehicle
 2754 Directories: gravure printing (not publishing)
 2751 Directories: letterpress and screen printing (not publishing)
 2741 Directories: publishing and printing, or publishing only
 3721 Dirigibles
 3589 Dirt sweeping units, industrial
 2599 Dish carts, restaurant equipment
 2259 Dishcloths, made in knitting mills
 2211 Dishcloths, made in weaving mills
 2392 Dishcloths, nonwoven textile
 3263 Dishes, commercial and household: fine earthenware (whiteware)
 3262 Dishes, commercial and household: vitreous china
 2654 Dishes, paper: *m/fpm* except those made from pressed or molded pulp
 3079 Dishes, plastics
 2646 Dishes, pressed and molded pulp: *m/fpm*
 3944 Dishes, toy
 2499 Dishes, wood
 3589 Dishwashing machines, commercial
 3639 Dishwashing machines, household
 2879 Disinfectants, agricultural
 2842 Disinfectants, household and industrial plant

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STANDARD INDUSTRIAL CLASSIFICATION

- 3573 Disk and drum drives and devices, magnetic
 3843 Disks, abrasive: dental
 3999 Dispensers, soap
 3079 Dispensers, tissue: plastics
 3586 Dispensing and measuring pumps, gasoline and oil
 2851 Dispersions, thermoplastic and colloidal: paint
 3585 Display cases and cabinets, refrigerated
 2542 Display cases and fixtures, except refrigerated: metal
 2541 Display cases and fixtures, except refrigerated: wood
 2499 Display forms for boots and shoes, regardless of material
 3999 Display forms, except shoe display forms
 2653 Display items, corrugated and solid fiberboard: *mfp*
 2789 Display mounting
 3993 Displays, advertising: except printed
 3993 Displays, paint process
 2865 Distillates, coal tar
 3312 Distillates, derived from chemical recovery coke ovens
 2861 Distillates, wood
 3567 Distillation ovens, charcoal and coke
 3811 Distillation racks, laboratory
 2899 Distilled water
 2085 Distillers dried grains and solubles
 3551 Distillery machinery
 3811 Distilling apparatus, laboratory type
 3825 Distortion meters and analyzers
 3613 Distribution boards, electric
 3613 Distribution cutouts
 3612 Distribution transformers, electric
 3531 Distributors (construction machinery)
 3694 Distributors, automotive: electric
 3531 Ditchers, ladder: vertical boom or wheel
 2834 Diuretics
 3728 Dive brakes, aircraft
 3448 Docks, prefabricated: metal
 2047 Dog and cat food
 3199 Dog furnishings: collars, leashes, harness, muzzles, etc.—leather
 2649 Dollies, paper: *mfp*
 3944 Doll carriages and carts
 3999 Doll wigs (hair)
 3537 Dollies (hand or power trucks), industrial: except mining
 3942 Dolls, doll parts, and doll clothing, except wigs
 3297 Dolomite and dolomite-magnesite brick and shapes
 3274 Dolomite, dead-burned
 3274 Dolomitic lime
 3647 Dome lights, auto
 3561 Domestic water pumps
 3944 Dominoes
 3429 Door bolts and checks
 3442 Door frames and sash, metal
 2431 Door frames and sash, wood
 3272 Door frames, concrete
 3444 Door hoods, aluminum
 3429 Door locks and lock sets
 3496 Door mats, made from purchased wire
 3069 Door mats, rubber
 2279 Door mats: twisted paper, grass, reed, coir, sisal, jute, and rag
 3699 Door opening and closing devices, except photoelectric cell operated
 3662 Door opening control devices, radio and photoelectric cell operated
 3442 Door screens, metal
 2431 Door screens, wood
 2431 Door shutters, wood
 2431 Door trim, wood
 3612 Doorbell transformers, electric
 2431 Doors, combination screen-storm: wood
 3079 Doors, folding: plastics or plastics coated fabric—metal frame
 3442 Doors, louver: all metal or metal frame
 3231 Doors, made from purchased glass
 3442 Doors, metal and metal covered
 3499 Doors, safe and vault: iron and steel
 2431 Doors, wood
 2851 Dopes (paint)
 3732 Dories, building and repairing
 2431 Dormers, wood
 3552 Doubling and twisting frames (textile machinery)
 3551 Dough mixing machinery
 2045 Dough, biscuit: canned—*mfp*
 2041 Dough, biscuit: canned—*mt*
 2045 Doughnut flour, prepared: *mfp*
 2051 Doughnuts
 2045 Doughs, refrigerated: *mfp*
 2041 Doughs, refrigerated: *mt*
 3553 Dovetailing machines (woodworking machinery)
 3452 Dowel pins, metal
 2499 Dowels, wood
 3962 Down (feathers)
 3079 Downspouts, plastics

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3444 Downspouts, sheet metal
 3531 Dozers, tractor mounted: material moving
 3823 Draft gauges, industrial process type
 3811 Drafting instruments and machines
 3952 Drafting materials, except instruments
 3531 Draglines, powered
 2861 Dragon's blood
 3523 Drags (agricultural equipment)
 3531 Drags, road (construction and road maintenance equipment)
 3432 Drain cocks
 2842 Drain pipe solvents and cleaners
 3499 Drain plugs, magnetic
 3259 Drain tile, clay
 3272 Drain tile, concrete
 2541 Drainboards, plastic laminated
 3432 Drains, plumbers'
 2211 Draperies and drapery fabrics, cotton: *mitse*
 2221 Draperies and drapery fabrics, man-made fiber and silk: *mitse*
 2391 Draperies, plastic and textile: *mfp*
 2591 Drapery rods, poles, and fixtures
 3842 Drapes, surgical: cotton
 3549 Draw benches
 2254 Drawers (apparel), *mitse*
 2322 Drawers: men's, youths', and boys': *mfp*
 3552 Drawing frames, textile
 3952 Drawing inks, blacks and colored
 3549 Drawing machinery and equipment, except wire drawing dies
 3952 Drawing tables and boards, artists'
 3423 Drawknives
 3731 Dredges, building and repairing
 3531 Dredging machinery
 2381 Dress and semidress gloves, except knit and all-leather
 2259 Dress and semidress gloves, knit: *mitse*
 3151 Dress and semidress gloves, leather
 2211 Dress fabrics, cotton
 2221 Dress fabrics, man-made fiber and silk
 2396 Dress linings
 3069 Dress shields, vulcanized rubber and rubberized fabric: *mitse*
 3143 Dress shoes, men's
 2396 Dress trimmings, fabric: *mfp*
 2392 Dresser scarfs—*mfp*
 2511 Dressers
 3545 Dressers, abrasive wheel: diamond point and other
 3942 Dresses, doll
 2253 Dresses, hand knit: for the trade
 2253 Dresses, *mitse*
 2335 Dresses, paper
 2361 Dresses: girls', children's, and infants': *mfp*
 2335 Dresses: women's, misses', and juniors': *mfp*
 2384 Dressing gowns, men's and women's
 3999 Dressing of furs: bleaching, blending, currying, scraping, and tanning
 2511 Dressing tables
 2842 Dressings for fabricated leather and other materials
 2844 Dressings, cosmetic
 2035 Dressings, food
 3842 Dressings, surgical
 2063 Dried beet pulp
 2037 Dried citrus pulp
 2034 Dried fruits and vegetables
 2013 Dried meats, *mfp*
 3567 Driers and redriers, industrial process
 3569 Driers and reel, fire hose
 2499 Driers, clothes (clothes horses): wood
 3582 Driers, commercial laundry except coin-operated
 3999 Driers, hair: designed for beauty parlors
 3633 Driers, laundry: household and coin-operated
 2851 Driers, paint
 3861 Driers, photographic
 3523 Driers: grain, hay, and seed (agricultural implements)
 3634 Driers: hand, face, and hair—electric
 3811 Driftmeters, aeronautical
 3545 Drill bits, metalworking
 3423 Drill bits, woodworking
 3545 Drill bushings (drilling jig)
 3541 Drill presses (machine tools)
 3533 Drill rigs, all types
 3499 Drill stands
 3545 Drilling machine attachments and accessories (machine tool accessories)
 3541 Drilling machine tools (metal-cutting)
 2899 Drilling mud
 3915 Drilling of pearls
 3731 Drilling platforms, floating
 3533 Drilling tools for gas, oil, or water wells
 3546 Drilling tools, masonry and concrete: power (portable)
 3546 Drills (except rock drilling and coring), portable: electric and pneumatic

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STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|--|------|--|
| 3545 | Drills (machine tool accessories) | 2023 | Dry milk products: whole milk, nonfat milk, buttermilk, whey, and cream |
| 3532 | Drills and drilling equipment, mining: except oil field drills | 3634 | Dry shavers (electric razors) |
| 3533 | Drills, core | 3731 | Drydocks, floating |
| 2211 | Drills, cotton | 3496 | Drying belts, made from purchased wire |
| 3843 | Drills, dental | 2351 | Drying japans |
| 3546 | Drills, hand: electric | 3559 | Drying kilns, lumber |
| 3532 | Drills, rock: portable | 3552 | Drying machines, textile: for stock, yarn, and cloth |
| 2087 | Drink powders and concentrates | 2211 | Duck, cotton |
| 2654 | Drinking cups, paper: <i>m/fpm</i> except those made from pressed or molded pulp | 2016 | Ducks, dressed and packed |
| 3431 | Drinking fountains, except mechanically refrigerated: metal | 3321 | Ductile iron castings |
| 3563 | Drinking fountains, mechanically refrigerated | 3443 | Ducting, metal plate |
| 3261 | Drinking fountains, vitreous china | 3292 | Ducts, asbestos cement |
| 2654 | Drinking straws, except glass or plastic: <i>m/fpm</i> | 3444 | Ducts, sheet metal |
| 3229 | Drinking straws, glass | 2393 | Duffel bags, canvas |
| 2066 | Drinks, fresh fruit: bottled or canned | 3949 | Dumbbells |
| 3568 | Drive chains, bicycle and motorcycle | 3534 | Dumbwaiters |
| 3714 | Drive shafts, motor vehicle | 3532 | Dumpers, car: mining |
| 2411 | Driving timber | 2328 | Dungarees: men's, youths', and boys' |
| 2394 | Drop cloths, fabric: <i>m/fpm</i> | 2693 | Duplicating ink |
| 3462 | Drop forgings, iron and steel: not made in rolling mills | 3579 | Duplicating machines |
| 3543 | Drop hammers, for forging and shaping metal | 3541 | Duplicators (machine tools) |
| 2365 | Drug dyes, synthetic | 2041 | Durum flour |
| 2333 | Drug grading, grinding, and milling | 3564 | Dust and fume collecting equipment, industrial |
| 2634 | Druggists' preparations (pharmaceuticals) | 2392 | Dust cloths |
| 3069 | Druggists' sundries, rubber | 3564 | Dust collection equipment |
| 3537 | Drum cradles | 2842 | Dust mats, gelatin |
| 3931 | Drummers' traps | 2392 | Dust mops |
| 2655 | Drums, fiber (metal end or all fiber): <i>m/fpm</i> | 3311 | Dust sampling and analysis equipment |
| 3931 | Drums, parts, and accessories (musical instruments) | 2384 | Dusters (apparel) |
| 3079 | Drums, plastics (containers) | 2392 | Dusters, fabric |
| 2449 | Drums, plywood | 3962 | Dusters, feather |
| 3412 | Drums, shipping: steel and other metal | 3523 | Dusters, mechanical: agricultural |
| 2449 | Drums, shipping: wood—wirebound | 3728 | Dusting and spraying equipment, aircraft |
| 3944 | Drums, toy | 2842 | Dusting cloths, chemically treated |
| 3692 | Dry cell batteries, single and multiple cell | 2392 | Dusting cloths, plain |
| 3633 | Dry cleaning and laundry machines, household: including coin-operated | 3563 | Dusting outfits for metal, paints, and chemicals (portable or vehicular) |
| 3532 | Dry cleaning equipment and machinery, commercial | 2211 | Duvetyn, cotton |
| 2342 | Dry cleaning preparations | 2221 | Duvetyn, man-made fiber and silk |
| 2061 | Dry felts, <i>misc</i> | 2451 | Dwellings, mobile |
| 2313 | Dry ice, (solid carbon dioxide) | 3448 | Dwellings, prefabricated or portable: metal |
| | | 2365 | Dye (cyclic) intermediates |
| | | 2842 | Dye removing cream, petroleum base |
| | | 2841 | Dye removing cream, soap base |
| | | 2257 | Dyeing and finishing circular knit fabrics |
| | | 2252 | Dyeing and finishing hosiery, except women's full and knee length |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2259 Dyeing and finishing knit gloves and mittens
 2253 Dyeing and finishing knit outerwear, except hosiery and gloves
 2254 Dyeing and finishing knit underwear
 2292 Dyeing and finishing lace goods
 2272 Dyeing and finishing of tufted rugs and carpets
 2231 Dyeing and finishing of wool and similar fibers: except knit
 2258 Dyeing and finishing warp knit fabrics
 2251 Dyeing and finishing women's full and knee length hosiery
 2261 Dyeing cotton broad woven fabrics
 3962 Dyeing feathers, for the trade
 3999 Dyeing furs
 2381 Dyeing gloves, except knit and all-leather: for the trade
 3552 Dyeing machinery, textile
 2262 Dyeing man-made fiber and silk broad woven fabrics
 2861 Dyeing materials, natural
 2269 Dyeing raw stock, yarn, and narrow fabrics: except knit and wool
 3999 Dyeing sponges
 2399 Dyers' nets
 2865 Dyes, food: synthetic
 2844 Dyes, hair
 2899 Dyes, household
 2865 Dyes, synthetic organic
 2861 Dyestuffs, natural
 3832 Dyna-lens
 2892 Dynamite
 3829 Dynamometer instruments
 3621 Dynamos, electric: except automotive
 3621 Dynamotors
 3662 Dynamotrons
 3728 Dynetric balancing stands, aircraft
 3429 Dzus fasteners
- E**
- 3842 Ear stoppers
 3269 Earthenware table and kitchen articles, coarse
 3263 Earthenware, household and commercial: semivitreous
 3952 Easels, artists'
 2771 Easter cards, except hand painted: printed, engraved, lithographed, etc.
 **** Easter cards, hand painted—see nonmanufacturing
 3444 Eaves, sheet metal
 3281 Ecclesiastical statuary, marble
- 3299 Ecclesiastical statuary: gypsum, clay, or papier mache—factory production
 3914 Ecclesiastical ware: silver, nickel silver, pewter, and plated
 3443 Economizers (boilers)
 3423 Edge tools for woodworking: augers, bits, gimlets, countersinks, etc.
 2789 Edging books, cards, or paper
 2292 Edgings, lace
 3861 Editing equipment, motion picture: rewinds, viewers, titlers, splicers
 2834 Effervescent salts
 2017 Egg albumen
 2645 Egg cartons, die-cut paper and paperboard: *m/fpm*
 2646 Egg cartons, molded pulp: *m/fpm*
 2646 Egg case filler flats, molded pulp: *m/fpm*
 2645 Egg case fillers and flats, die-cut from purchased paper or paperboard
 2441 Egg cases, wood
 3634 Egg cookers, electric
 2017 Eggs: canned, dehydrated, desiccated, frozen, processed
 2017 Eggs: drying, freezing, and breaking
 3825 Elapsed time meters, electronic
 2211 Elastic fabrics, cotton: over 12 inches in width
 2221 Elastic fabrics, man-made fiber and silk: over 12 inches in width
 2259 Elastic girdle blanks, made in knitting mills
 3842 Elastic hosiery, orthopedic
 3542 Elastic membrane metal forming machines
 2241 Elastic narrow fabrics, woven or braided
 2241 Elastic webbing
 2824 Elastomeric fibers
 2821 Elastomers, nonvulcanizable (plastics)
 2822 Elastomers, vulcanizable (synthetic rubber)
 3444 Elbows, for conductor pipe, hot air ducts, stovepipe, etc.: sheet metal
 3494 Elbows, pipe: except pressure and soil pipe
 3321 Elbows, pipe: pressure and soil pipe, cast iron
 3822 Electric air cleaner controls
 3823 Electric and electronic controllers, industrial process type
 3694 Electric equipment, automotive
 3699 Electric fence chargers
 3612 Electric furnace transformers

3822	Electric heat proportioning controls, modulating controls	3832	Electron microscopes
2241	Electric insulating tapes and braids, except plastic	3832	Electron microscopes
3229	Electric insulators, glass	3832	Electron paramagnetic spin type apparatus
3699	Electric lamp (bulb) parts	3825	Electron tube test equipment
3641	Electric lamps	3673	Electron tubes, cathode ray: except television receiving
3641	Electric light bulbs, complete	3671	Electron tubes, radio and television receiving: except cathode ray tubes
3559	Electric photolab plating equipment	3672	Electron tubes, television receiving: cathode ray
3559	Electric screening equipment	3673	Electron tubes: transmitting, industrial, and special purpose
3823	Electric space heater controls	3541	Electron-discharge metal cutting machine tools
3634	Electric space heaters	3679	Electronic circuits, except semiconductor or solid state
3541	Electrical discharge erosion machines	3573	Electronic computer subassembly of film reader and phototheodolite
3541	Electrical discharge grinding machines	3573	Electronic computing machines
3264	Electrical insulators: pin, suspension, switch and bus type—porcelain	3662	Electronic control, detection, or communication systems
3825	Electrical power measuring equipment	3674	Electronic devices, solid state
3993	Electrical signs and advertising displays	3469	Electronic enclosures: stamped or pressed
3069	Electricians' gloves, rubber	3662	Electronic field detection apparatus
3693	Electrocardiographs	3661	Electronic secretary
3799	Electrocars, for transporting golfers	3825	Electronic test equipment for testing electrical characteristics
3629	Electrochemical generators (fuel cells)	3824	Electronic totalizing counters
3541	Electrochemical milling machines	3679	Electronic tube parts, except glass blanks
3623	Electrode holders, for electric welding apparatus	3832	Electrophoresis equipment
3823	Electrodes used in industrial process measurement	3559	Electroplating machinery and equipment, except rolling mill lines
3699	Electrodes, cold cathode fluorescent lamp	3471	Electroplating of metals and formed products, for the trade
3623	Electrodes, electric welding	3662	Electrostatic particle accelerators
3624	Electrodes, for thermal and electrolytic uses: carbon and graphite	3564	Electrostatic precipitators
3693	Electroencephalographs	3641	Electrotherapeutic lamp units for ultra-violet and infra-red radiation
3542	Electroforming machines	3693	Electrotherapy unit
3829	Electrogamma ray loggers	2794	Electrotype plates
3693	Electrogastrograph	2794	Electrotyping for the trade
3494	Electrohydraulic servo valves, metal	3555	Electrotyping machines
3471	Electrolizing steel for the trade	2879	Elements, minor or trace (agricultural chemicals)
3646	Electroluminescents (lighting fixtures)	3041	Elevator belting, rubber
3823	Electrolytic conductivity instruments, industrial process type	3446	Elevator guide rails
3541	Electrolytic metal cutting machine tools	3534	Elevators and elevator equipment, passenger and freight
3622	Electromagnetic clutches and brakes	3728	Elevators, aircraft
3824	Electromechanical counters	3523	Elevators, farm
3693	Electromedical apparatus	3534	Elevators, powered (nonfarm)
3318	Electrometallurgical products, except aluminum, magnesium, and copper		
3693	Electromyographs		
3673	Electron beam (beta ray) generator tubes		
3662	Electron beam metal cutting, forming and welding machines		
3662	Electron beam welders		
3662	Electron linear accelerators		

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2869 Embalming fluids
 2395 Emblems, embroidered
 2399 Emblems, made from fabric
 3199 Embossed leather goods
 2261 Embossing cotton broad woven fabrics
 2269 Embossing linen broad woven fabrics
 3579 Embossing machines, for store and office use
 2262 Embossing man-made fiber and silk broad woven fabrics
 2789 Embossing of books
 3111 Embossing of leather
 2751 Embossing on paper
 2753 Embossing plates for printing
 2397 Embroideries, Schiffli machine
 2395 Embroideries: metallic, beaded, sequined
 3999 Embroidery kits
 3552 Embroidery machines
 2395 Embroidery products, except Schiffli machine
 2284 Embroidery thread: cotton, silk, and man-made fiber
 2281 Embroidery yarn: cotton, silk and man-made staple
 2283 Embroidery yarn: wool, mohair, or similar animal fiber
 3291 Emery abrasives
 3728 Empennage (tail) assemblies and parts, aircraft
 2843 Emulsifiers, except food and pharmaceutical
 2834 Emulsifiers, fluorescent inspection
 2099 Emulsifiers, food
 2834 Emulsions, pharmaceutical
 3253 Enamel tile, floor and wall: clay
 3231 Enameled glass, made from purchased glass
 2641 Enameled paper, *mfp*
 3469 Enameled ware, porcelain: except plumbers' supplies
 3479 Enameling (including porcelain) of metal products, for the trade
 3567 Enameling ovens
 3952 Enamels, china painting
 3843 Enamels, dentists'
 2851 Enamels, except dental and china painting
 2032 Enchiladas, canned
 3662 Encoders, digital
 3269 Encrusting gold, silver, or other metal on china, for the trade
 3231 Encrusting gold, silver, or other metals on glass products: *mfp*
 2511 End tables, wood
 2833 Endocrine products
 3822 Energy cut-off controls, residential and commercial types
 3825 Energy measuring equipment, electrical
 3724 Engine heaters, aircraft
 3724 Engine mount parts, aircraft
 3724 Engine pumps, aircraft
 3537 Engine stands and racks, metal
 3519 Engine starters, pneumatic
 3494 Engineered specification valves for controlled variables
 3724 Engines and engine parts, aircraft: internal combustion and jet propulsion
 3764 Engines and engine parts, guided missile
 3519 Engines and engine parts, military tank
 3714 Engines and parts, except diesel: motor vehicle
 3569 Engines, atomic
 3519 Engines, internal combustion: except aircraft and non-diesel automotive
 3944 Engines, miniature
 3743 Engines, steam (locomotives)
 3511 Engines, steam: except locomotives
 3519 Engines: diesel and semi-diesel and dual fuel—except aircraft
 3231 Engraved glassware
 3423 Engravers' tools, hand
 3479 Engraving jewelry, silverware and metal for the trade: except printing
 3555 Engraving machinery and equipment (printing trades machinery)
 2753 Engraving of cards, except greeting cards
 3079 Engraving of plastics
 2753 Engraving on copper, steel, wood, or rubber plates, for printing purposes
 2753 Engraving on textile printing rolls
 2751 Engraving, plateless
 2753 Engraving, steel line: for printing purposes
 3861 Enlargers, photographic
 2335 Ensemble dresses: women's, misses', and juniors'—*mfp*
 3523 Ensilage blowers and cutters
 3531 Entrenching machines
 3555 Envelope printing presses
 3579 Envelope stuffing, sealing, and addressing machines
 2642 Envelopes, printed or unprinted: paper, glassine, cellophane, and pliofilm
 2754 Envelopes: gravure printing
 2751 Envelopes: letterpress and screen printing

STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|---|------|--|
| 3811 | Environmental testing equipment | 2822 | Ethylene-propylene rubbers |
| 2869 | Enzymes | 2821 | Ethylene-vinyl acetate resins |
| 2865 | Eosine toners | 2899 | Eucalyptus oil |
| 2822 | EPDM polymers | 3585 | Evaporative condensers (heat transfer equipment) |
| 2833 | Ephedrine and derivatives | 3443 | Evaporators (process vessels), metal plate |
| 2821 | Epichlorohydrin bisphenol | 3531 | Excavators: cable, clamshell, crane, derrick, dragline, power shovel, etc. |
| 2821 | Epichlorohydrin diphenol | 2411 | Excelsior stock, hewn |
| 2822 | Epichlorohydrin elastomers | 2429 | Excelsior, including pads and wrappers: wood |
| 2891 | Epoxy adhesives | 2649 | Excelsior, paper: <i>m/psm</i> |
| 2851 | Epoxy coatings, made from purchased resin | 3443 | Exchangers, heat: industrial, scientific, and nuclear |
| 2821 | Epoxy resins | 3621 | Exciter assemblies (motor and generator parts) |
| 3952 | Eraser guides and shields | 3949 | Exercising machines |
| 3069 | Erasers: rubber, or rubber and abrasive combined | 3564 | Exhaust fans, except household and kitchen |
| 3944 | Erector sets, toy | 3634 | Exhaust fans, household: kitchen—except attic |
| 2833 | Ergot alkaloids | 3714 | Exhaust systems and parts, motor vehicle |
| 3534 | Escalators, passenger and freight | 3724 | Exhaust systems, aircraft |
| 2899 | Essential oils | 3999 | Exhibits and slides for classroom use, preparation of |
| 2822 | Estane | 2899 | Exothermics for metal industries |
| 2821 | Ester gum | 3494 | Expansion joints for piping systems, metal |
| 2869 | Esters of phosphoric, adipic, lauric, oleic, sebacic, and stearic acids | 3441 | Expansion joints: iron and steel (structural shapes) |
| 2869 | Esters of phthalic anhydride | 2892 | Explosive cartridges for concussion forming of metal |
| 2869 | Esters of polyhydric alcohols | 2892 | Explosive compounds |
| 3555 | Etching machines (printing trades machinery) | 2892 | Explosives |
| 2753 | Etching on copper, steel, wood, or rubber plates, for printing purposes | 3861 | Exposure meters, photographic |
| 3479 | Etching on metals for the trade, for purposes other than printing | 2211 | Express stripes, cotton |
| 2869 | Ethanol, industrial | 3944 | Express wagons, children's |
| 2869 | Ether | 3699 | Extension cords, made from purchased insulated wire |
| 2834 | Ether for anesthetic use | 2499 | Extension planks, wood |
| 2861 | Ethyl acetate, natural | 3842 | Extension shoes, orthopedic |
| 2869 | Ethyl acetate, synthetic | 2879 | Exterminating products, for household and industrial use |
| 2085 | Ethyl alcohol for medicinal and beverage purposes | 3724 | External power units, for hand inertia starters, aircraft |
| 2869 | Ethyl alcohol, industrial (nonbeverage) | 3999 | Extinguishers, fire: portable |
| 2869 | Ethyl butyrate | 2082 | Extract, malt |
| 2821 | Ethyl cellulose plastics | 3582 | Extractors and driers, commercial laundry except coin-operated |
| 2869 | Ethyl cellulose, unplasticized | 3531 | Extractors, piling |
| 2869 | Ethyl chloride | 2834 | Extracts of botanicals: powdered, pilular, solid, and fluid |
| 2869 | Ethyl ether | | |
| 2869 | Ethyl formate | | |
| 2869 | Ethyl nitrite | | |
| 2869 | Ethyl perhydrophenanthrene | | |
| 2865 | Ethylbenzene | | |
| 2869 | Ethylene | | |
| 2869 | Ethylene glycol | | |
| 2869 | Ethylene glycol ether | | |
| 2869 | Ethylene glycol, inhibited | | |
| 2869 | Ethylene oxide | | |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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2861 Extracts, dyeing and tanning: natural
 3354 Extruded shapes, aluminum
 3351 Extruded shapes, copper and copper alloy
 3356 Extruded shapes, nonferrous metals and alloys, except copper and aluminum
 3542 Extruding machines (machine tools), metal
 3544 Extrusion dies
 3355 Extrusion ingot, aluminum: made in rolling mills
 3334 Extrusion ingot, aluminum: primary
 3841 Eye examining instruments and apparatus
 3851 Eyeglasses, lenses, and frames
 2396 Eyelet making, for the trade
 2641 Eyelets, cloth and paper: *m/psm*
 3964 Eyelets, metal: for clothing, fabrics, boots and shoes, paper, etc.
 3851 Eyes, glass and plastic

F

2231 Fabric finishing of wool, mohair, and similar fibers: except knit
 2257 Fabric finishing, circular knit
 2261 Fabric finishing, cotton broad woven fabrics
 2262 Fabric finishing, man-made fiber and silk broad woven
 2258 Fabric finishing, warp knit
 2296 Fabric for reinforcing rubber tires, industrial belting, and fuel cells
 2231 Fabric, animal fiber: broad woven
 2241 Fabric, animal fiber: narrow woven
 2257 Fabric, circular knit
 2258 Fabric, warp or flat knit
 3498 Fabricated pipe and fittings: threading, bending, etc. of purchased pipe
 3441 Fabricated structural steel
 2297 Fabrics, bonded fiber: except felt
 2211 Fabrics, broad woven: cotton
 2221 Fabrics, broad woven: man-made fiber and silk
 2231 Fabrics, broad woven: of wool, mohair, and similar fibers
 2295 Fabrics, coated and impregnated: except rubberized
 2952 Fabrics, roofing: asphalt or tar saturated
 3069 Fabrics, rubberized
 3496 Fabrics, woven wire: made from purchased wire
 2299 Fabrics: linen, jute, hemp, ramie—except felt
 2844 Face creams and lotions
 3644 Face plates (wiring devices)
 2844 Face powders
 2621 Facial tissue stock, *mtse*
 2647 Facial tissues, *m/psm*
 3541 Facing machines
 3251 Facing tile, clay: glazed and unglazed
 2899 Facings (chemical foundry supplies)
 3662 Facsimile equipment, radio
 2754 Facsimile letters: gravure printing
 2751 Facsimile letters: letterpress and screen printing
 2599 Factory furniture: stools, work benches, tool stands, and cabinets
 3253 Faience tile
 2221 Failles
 2646 False faces, paper mache: *m/psm*
 3822 Fan control, temperature responsive
 3599 Fan forges
 3111 Fancy leathers
 2641 Fancy paper, coated and glazed: *m/psm*
 2761 Fanfold forms
 3634 Fans, electric: household-exhaust and ventilating, except attic fans
 3564 Fans, general industrial and commercial, and all attic fans
 3829 Fare registers, for street cars, buses, etc.
 2043 Farina (cereal breakfast food)
 2045 Farina, except cereal breakfast food: *m/psm*
 2041 Farina, *mtse*
 3448 Farm buildings, prefabricated or portable: metal
 2452 Farm buildings, prefabricated or portable: wood
 3523 Farm elevators
 3523 Farm machinery and equipment
 3443 Farm storage tanks, metal plate
 3523 Farm tractors
 3523 Farm wagons
 2026 Farmers' cheese
 2752 Fashion plates, lithographed
 2754 Fashion plates: gravure printing
 2751 Fashion plates: letterpress and screen printing
 3964 Fasteners: glove, slide, snap, and hook-and-eye
 3811 Fathometers
 3829 Fatigue testing machines, industrial: mechanical
 2843 Fats, sulfonated

STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|---|------|--|
| 2869 | Fatty acid esters, amines, etc. | 3443 | Fermenters (process vessels), metal plate |
| 2899 | Fatty acids: margaric, oleic, and stearic | 2869 | Ferric ammonium oxalate |
| 3261 | Faucet handles, vitreous china and earthenware | 2819 | Ferric chloride |
| 3432 | Faucets, metal | 3599 | Ferris wheels |
| 2499 | Faucets, wood | 3679 | Ferrite electronic parts |
| 3582 | Feather cleaning and sterilizing machinery | 3264 | Ferrite, except for electronic application |
| 2048 | Feather meal, made from purchased materials | 3313 | Ferroalloys, not made in blast furnaces |
| 3962 | Feathers: curling, dyeing, and renovating—for the trade | 3312 | Ferroalloys, produced in blast furnaces |
| 3199 | Feed bags for horses | 3313 | Ferrochromium |
| 2048 | Feed concentrates | 2819 | Ferrocyanides |
| 3523 | Feed grinders-mixers | 3313 | Ferromanganese, not produced in blast furnaces |
| 3523 | Feed grinders, crushers, and mixers (agricultural machinery) | 3313 | Ferromolybdenum |
| 3551 | Feed mixers, except agricultural machinery | 3313 | Ferrophosphorus |
| 2048 | Feed premixes | 3313 | Ferrosilicon, not produced in blast furnaces |
| 2048 | Feed supplements | 3313 | Ferrotitanium |
| 2046 | Feed, gluten | 3313 | Ferrotungsten |
| 3612 | Feeder voltage regulators and boosters (electric transformers) | 3547 | Ferrous and nonferrous mill equipment, auxiliary |
| 3523 | Feeders, chicken | 3313 | Ferrovanadium |
| 3532 | Feeders, ore and aggregate | 3499 | Ferrules, nonferrous |
| 2048 | Feeds, prepared (including mineral): for animals and fowls—except pets | 3731 | Ferryboats, building and repairing |
| 2048 | Feeds, stock: dry | 2819 | Fertilizer materials: muriate and sulfate of potash, not produced at mines |
| 3295 | Feldspar, ground or otherwise treated | 2875 | Fertilizers, mixed: made in plants not manufacturing fertilizer materials |
| 2499 | Fellies, wood | 2874 | Fertilizers, mixed: made in plants producing phosphatic fertilizer materials |
| 2291 | Felt goods, except woven felts and hats: wool, hair, jute, or other fiber | 2873 | Fertilizers: natural (organic), except compost |
| 3292 | Felt roll roofing, asbestos | 3523 | Fertilizing machinery (agricultural machinery) |
| 3951 | Felt tip markers | 2834 | Fever remedies |
| 3292 | Felt, woven amosite: asbestos | 2661 | Fiber board, wood or other vegetable pulp: <i>mitse</i> |
| 2661 | Felts, building: unsaturated— <i>mitse</i> | 2519 | Fiber furniture, household: padded or plain |
| 2231 | Felts, of wool, mohair, and similar fibers: woven | 3832 | Fiber optical devices |
| 2952 | Felts, roofing: asphalt saturated and tar saturated—roll or shingle | 2611 | Fiber pulp: made from wood, rags, waste paper, linters, straw, and bagasse |
| 3699 | Fence chargers, electric | 3079 | Fiber, vulcanized: sheets, rods, tubes, etc. |
| 3496 | Fence gates, made from purchased wire | 2221 | Fiberglass fabrics |
| 3312 | Fence posts, iron and steel: made in steel works or rolling mills | 3296 | Fiberglass insulation |
| 3423 | Fence stretchers (hand tools) | 2823 | Fibers, cellulose man-made |
| 3446 | Fences and posts, ornamental iron and steel | 3229 | Fibers, glass |
| 3949 | Fencing equipment (sporting goods) | 2824 | Fibers, man-made: except cellulosic |
| 3496 | Fencing, made from purchased wire | 2823 | Fibers, rayon |
| 2499 | Fencing, wood: except rough pickets, poles and rails | 2294 | Fibers, textile: recovery from textile mill waste and rags |
| 3465 | Fenders, stamped and pressed | 2823 | Fibers, viscose |
| | | 3489 | Field artillery |
| | | 3832 | Field glasses |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2329 Field jackets, military
 3825 Field strength and intensity measuring equipment, electrical
 3523 Field type rotary tillers (agricultural machinery)
 3714 Fifth wheels
 2032 Fig pudding
 3953 Figures, metal
 3269 Figures, pottery: china, earthenware, and stoneware
 3999 Figures, wax: mannikins, etc.
 3699 Filaments, for electric lamps
 2522 File drawer frames, metal
 3423 Files, including recutting and resharpening
 3545 Files, machine tool
 2522 Filing boxes, cabinets, and cases: metal
 2521 Filing boxes, cabinets, and cases: wood
 2652 Filing boxes, paperboard: *mfp*
 2645 Filing folders, *mfp*
 3541 Filing machines, metal (machine tools)
 2782 Fillers and forms, looseleaf: pen ruled or printed only
 2648 Fillers for looseleaf devices, except printed forms: *mfp*
 2645 Fillers, egg case: die-cut from purchased paper or paperboard
 2851 Fillers, wood: dry, liquid, and paste
 2092 Fillets, fish
 2293 Filling, upholstery: except excelsior
 2099 Fillings, cake or pie: except fruits, vegetables and meat
 2649 Fills, insulating: paper—*mfp*
 3079 Film base, cellulose acetate or nitrocellulose plastics (nonsensitized)
 3573 Film reader and digital storage phototheodolite devices
 3079 Film, plastics: unsupported
 3861 Film, sensitized: motion picture, X-ray, still camera, and special purpose
 2211 Filter cloth, cotton
 3569 Filter elements, fluid: hydraulic line
 2621 Filter paper, *mitse*
 3569 Filter systems for home swimming pools
 3494 Filter-lubricator-regulator valves, pneumatic
 3295 Filtering clays, treated purchased materials
 3269 Filtering media, pottery
 3564 Filters, air: for furnaces, air conditioning equipment, etc.
 3677 Filters, electronic
 3569 Filters, general line industrial: except internal combustion engine
 3599 Filters, internal combustion engine: oil, gasoline, air intake
 3569 Filters, pipe line
 3714 Filters: oil, fuel and air—motor vehicle
 3483 Fin assemblies, mortar: over 30 mm. (or over 1.18 inch)
 3483 Fin assemblies, torpedo and bomb
 3131 Findings, boot and shoe
 3915 Findings, jewelers'
 2396 Findings, suit and coat: coat fronts, pockets, etc.—men's and boys'
 3069 Finger cots, rubber
 3999 Fingerprint equipment, except cameras and optical equipment
 3531 Finishers and spreaders (construction equipment)
 2272 Finishers of tufted carpets and rugs
 3531 Finishers, concrete and bituminous: powdered
 2843 Finishing agents, textile and leather
 3547 Finishing equipment, rolling mill
 3552 Finishing machinery, textile
 3471 Finishing metal products and formed products, for the trade
 2257 Finishing of circular knit fabrics
 2261 Finishing of cotton broad woven fabrics
 3111 Finishing of leather
 2262 Finishing of man-made fiber and silk broad woven fabrics
 2258 Finishing of warp or flat knit fabrics
 2231 Finishing of wool, mohair, and similar fiber fabrics: except knit
 2269 Finishing raw stock, yarn, and narrow fabrics: except knit and wool
 2091 Finnan haddie (smoked haddock)
 3728 Fins, aircraft
 3469 Fins, tube: stamped metal
 3662 Fire alarm apparatus, electric
 3255 Fire clay blocks, bricks, tile and special shapes
 3662 Fire control and bombing equipment, electronic
 3832 Fire control equipment, optical
 3711 Fire department vehicles (motor vehicles)
 3829 Fire detector systems, nonelectric
 3442 Fire doors, metal and metal covered
 3446 Fire escapes, ferrous and nonferrous
 2899 Fire extinguisher charges
 3999 Fire extinguishers, portable

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STANDARD INDUSTRIAL CLASSIFICATION

- 3569 Fire fighting apparatus, except automotive and chemical
 3569 Fire hose, except rubber
 3041 Fire hose, rubber
 2261 Fire resistance finishing of cotton broad woven fabrics
 2262 Fire resistance finishing of man-made fiber and silk broad woven fabrics
 2899 Fire retardant chemicals
 3484 Firearms, 30 mm. (or 1.18 inch) and below
 3731 Fireboats, building and repairing
 3255 Firebrick, clay
 2311 Firemen's uniforms
 3429 Fireplace equipment (hardware)
 3273 Fireplaces, concrete
 3251 Fireproofing tile, clay
 2899 Fireworks
 3269 Firing china, for the trade
 2449 Firkins and kits, wood: coopered
 3842 First aid, snake bite, and burn kits
 2032 Fish cakes, canned
 2091 Fish egg bait, canned
 2092 Fish fillets
 2077 Fish liver oils, crude
 2833 Fish liver oils, refined and concentrated for medicinal use
 2077 Fish meal
 2298 Fish nets and seines, made in cordage or twine mills
 2077 Fish oil and fish oil meal
 2092 Fish sticks
 3644 Fish wire (electrical wiring tool)
 2091 Fish, canned
 2091 Fish: boneless, cured, dried, pickled, salted, and smoked
 2092 Fish: fresh, quick frozen, and cold pack (frozen)—packaged
 3732 Fishing boats, small: such as lobster boats, crab boats, and oyster boats
 3421 Fishing knives
 2298 Fishing lines, nets, seines: made in cordage or twine mills
 2399 Fishing nets, *m/fpm*
 3949 Fishing tackle (except lines, nets, and seines)
 3731 Fishing vessels, large: seiners and trawlers—building and repairing
 2819 Fissionable material production
 3494 Fittings, hose and tube: fluid power
 3321 Fittings, soil and pressure pipe: cast iron
 3841 Fixation appliances, internal
 3861 Fixers, prepared photographic: not made in chemical plants
 2541 Fixture tops, plastic laminated
 2591 Fixtures, curtain and drapery
 2542 Fixtures, display: office and store—metal
 2541 Fixtures, display: office and store—wood
 2599 Fixtures, office and store: except metal and wood
 3446 Flagpoles, metal
 2499 Flagpoles, wood
 2399 Flags, fabric
 3281 Flagstones
 3399 Flakes, metal
 3822 Flame safety controls for furnaces and boilers
 3489 Flame throwers (ordnance)
 3229 Flameware, glass and glass ceramic
 3541 Flange facing machines
 3562 Flange units for ball or roller bearings
 3494 Flanges and flange unions, pipe
 2321 Flannel shirts, except work shirts: men's, youths', and boys'
 2323 Flannel work shirts: men's, youths', and boys'
 2211 Flannelette
 2231 Flannels of wool, mohair, and similar fibers
 2211 Flannels, cotton
 3728 Flaps, aircraft wing
 2399 Flares (all kinds)
 3647 Flasher lights, automobile
 3861 Flashlight apparatus for photographers, except bulbs
 2899 Flashlight bombs (pyrotechnics)
 3641 Flashlight bulbs, photographic
 3648 Flashlights
 3316 Flat bright steel strip, cold rolled: not made in hot rolling mills
 2221 Flat crepes
 3493 Flat springs, sheet or strip stock
 3312 Flats, iron and steel: made in steel works and hot rolling mills
 2441 Flats, wood: greenhouse
 3914 Flatware: silver, nickel silver, pewter, stainless steel, and plated
 2026 Flavored milk drinks
 2087 Flavoring concentrates
 2087 Flavoring extracts, pastes, powders, and syrups
 2869 Flavors and flavoring materials, synthetic
 2299 Flax yarns and roving

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3111 Fleshers, leather (flesh side of split leather)
 3546 Flexible shaft metalworking machines, portable
 2751 Flexographic printing
 3949 Flies, artificial: for fishing
 3811 Flight instruments, aeronautical
 3662 Flight simulators (training aids), electronic
 3295 Flint, ground or otherwise treated
 3999 Flints, cigarette lighter
 2421 Flitches (veneer stock), made in sawmills
 3822 Float controls, residential and commercial types
 3211 Float glass
 3255 Floaters, glass house: clay
 3443 Floating covers, metal plate
 3949 Floats, for fish lines
 2294 Flock (recovered textile fibers)
 2261 Flock printing of cotton broad woven fabrics
 2262 Flock printing of man-made fiber and silk broad woven fabrics
 2269 Flock printing of narrow fabrics except wool
 3999 Flocking metal products for the trade
 3648 Floodlights
 3079 Floor and wall covering, unsupported plastics
 3251 Floor arch tile, clay
 2431 Floor baseboards, wood
 3299 Floor composition, magnesite
 2951 Floor composition, mastic: hot and cold
 3996 Floor coverings, asphalted-felt-base (linoleum)
 2272 Floor coverings, tufted
 2271 Floor coverings, woven textile fiber
 2279 Floor coverings: twisted paper, grass, reed, coir, sisal, jute, and rag
 3634 Floor fans, electric
 3272 Floor filler tiles, concrete
 3441 Floor jacks, metal
 3645 Floor lamps
 2392 Floor mops
 3441 Floor posts, adjustable: metal
 3589 Floor sanding, washing, and polishing machines: portable (commercial type)
 3272 Floor slabs, precast concrete
 3292 Floor tile, asphalt
 3253 Floor tile, ceramic: glazed and unglazed
 3272 Floor tile, precast terrazzo
 3469 Floor tile, stamped metal
 2842 Floor wax emulsion
 3639 Floor waxers and polishers, household: electric
 2842 Floor waxes
 2421 Flooring (dressed lumber), softwood
 3251 Flooring brick, clay
 3444 Flooring, cellular steel
 2426 Flooring, hardwood
 3446 Flooring, open steel (grating)
 3069 Flooring, rubber: tile or sheet
 2491 Flooring, wood block: treated
 3269 Florists' articles, red earthenware
 3496 Florists' designs, made from purchased wire
 3532 Flotation machinery (mining machinery)
 2292 Flouncings, lace
 2293 Flour bags, fabric: *m/fpm*
 2643 Flour bags, except fabric: *m/fpm*
 3551 Flour mill machinery
 2041 Flour mills
 2041 Flour mixes, *mitse*
 2044 Flour, rice
 2499 Flour, wood
 2045 Flour: blended, prepared, or self-rising—*m/fpm*
 2041 Flour: blended, prepared, or self-rising—*mitse*
 2041 Flour: buckwheat, corn, rye, and wheat
 3622 Flow actuated electrical switches
 3823 Flow instruments, industrial process type
 3299 Flower boxes, plaster of paris: factory production only
 3079 Flower pots, plastics
 3269 Flower pots, red earthenware
 3962 Flowers, artificial and preserved: except glass
 3231 Flowers, made from purchased glass
 3259 Flue lining, clay
 3444 Flues, stove and furnace: sheet metal
 3412 Fluid milk shipping containers, steel or other metal
 3728 Fluid power and control components, aircraft
 3599 Fluid power cylinders, hydraulic and pneumatic
 3569 Fluid power motors
 3494 Fluid power valves and fittings
 2899 Fluid, defrosting
 3823 Fluidic devices, circuits, and systems for process control
 2899 Fluidifier (retarder) for concrete
 3443 Flumes, metal plate
 3444 Flumes, sheet metal
 3612 Fluorescent ballasts

- 2899 Fluorescent inspection oil
 3899 Fluorescent lamp electrodes, cold cathode
 3841 Fluorescent lamps, electric
 3846 Fluorescent lighting fixtures, commercial
 3845 Fluorescent lighting fixtures, residential
 3812 Fluorescent lighting transformers
 3843 Fluorescent starters
 2869 Fluorinated hydrocarbon gases
 2819 Fluorine, elemental
 2822 Fluoro rubbers
 2822 Fluorocarbon derivative rubbers
 2824 Fluorocarbon fibers
 2821 Fluorohydrocarbon resins
 3693 Fluoroscopes
 3693 Fluoroscopic X-ray apparatus and tubes
 3431 Flush tanks, metal
 3261 Flush tanks, vitreous china
 3432 Flush valves
 3711 Flushers, street (motor vehicles)
 3931 Flutes and parts
 2899 Fluxes: brazing, soldering, galvanizing, and welding
 3199 Fly nets (harness)
 2641 Fly paper, *mfp*
 3496 Fly screening, made from purchased wire
 2879 Fly sprays
 3999 Fly swatters
 3699 Fly traps, electrical
 3851 FM and AM tuners
 2899 Foam charge mixtures
 3069 Foam rubber
 3079 Foamed pads and packaging, plastics
 3079 Foamed plastic products
 3079 Foams, plastics
 3647 Fog lights
 2649 Foli board, *mfp*
 3497 Foil containers for bakery goods and frozen foods, except bags and liners
 3497 Foil, except aluminum: not made in rolling mills
 3497 Foil, laminated to paper or other materials
 3353 Foil, plain aluminum
 2631 Folding boxboards, *misc*
 3079 Folding doors: plastic or plastic coated fabric, metal frame
 3554 Folding machines, paper: except office machines
 3962 Foliage, artificial and preserved: except glass
 3231 Foliage, made from purchased glass
 3551 Food choppers, grinders, mixers, and slicers: commercial type
 2887 Food colorings, except synthetic
 2654 Food containers, liquid tight: sanitary—*mfp*
 3411 Food containers, metal
 2899 Food contamination testing and screening kits
 2865 Food dyes and colors, synthetic
 2887 Food glaze, for glazing foods (*coleen*)
 3634 Food mixers, household: electric
 3551 Food packing and canning machinery
 2032 Food specialties, canned
 2038 Food specialties, frozen
 2599 Food trucks, restaurant equipment
 2599 Food wagons, restaurant
 3689 Food warming equipment, commercial
 3639 Food waste disposal units
 3842 Foot appliances, orthopedic
 3949 Footballs and football equipment and supplies, except uniforms
 3021 Footholds, rubber
 2389 Footlets
 2841 Foots soap
 3149 Footwear, children's: leather or vinyl with molded or vulcanized soles
 3149 Footwear, children's: except house slippers and vulcanized rubber footwear
 3143 Footwear, men's: except slippers, athletic, and vulcanized rubber footwear
 3143 Footwear, men's: leather or vinyl with molded or vulcanized soles
 3021 Footwear, rubber or rubber soled fabric
 3144 Footwear, women's: except slippers, athletic, vulcanized rubber footwear
 3144 Footwear, women's: leather or vinyl with molded or vulcanized soles
 3523 Forage blowers
 3523 Forage harvesters
 3843 Forceps, dental
 3841 Forceps, surgical
 3599 Forges, fan
 3542 Forging machinery and hammers
 3312 Forgings, iron and steel: made in steel works or rolling mills
 3462 Forgings, iron and steel: not made in rolling mills
 3463 Forgings, nonferrous metal: not made in hot rolling mills
 3483 Forgings, projectile: machined—for ammunition over 30 mm.
 3537 Fork lift trucks
 3914 Forks, table: all metal
 3421 Forks, table: except all metal

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- 3423 Forks: garden, hay and manure, stone and ballast
 2311 Formal jackets, men's and youths'
 2869 Formaldehyde (formalin)
 2869 Formalin
 2869 Formic acid and metallic salts
 3444 Forming machine work for the trade, except stampings: sheet metal
 3542 Forming machines
 2782 Forms and fillers, looseleaf: pen ruled or printed only
 3444 Forms for concrete, sheet metal
 3269 Forms for dipped rubber products, pottery
 3579 Forms handling equipment, for store or office use
 3443 Forms, collapsible: for tunnels
 2499 Forms, display: for boots and shoes—regardless of material
 3544 Forms, metal (molds): for foundry, plastic working machinery, etc.
 3999 Forms: display, dress, and show—except shoe display forms
 2342 Foundation garments, women's: *mfp*
 2645 Foundations, cardboard: *mfp*
 3999 Foundations, honeycomb (beekeepers' supplies)
 3361 Foundries, aluminum
 3321 Foundries, gray iron and semisteel
 3322 Foundries, malleable iron
 3369 Foundries, nonferrous metals: except aluminum, copper, and copper alloys
 3325 Foundries, steel: except investment
 3362 Foundries: brass, bronze, copper, and copper base alloy
 3565 Foundry cores
 3295 Foundry facings, ground or otherwise treated
 3559 Foundry machinery and equipment
 3565 Foundry patternmaking
 3255 Foundry refractories, clay
 2899 Foundry supplies
 3555 Foundry type, for printing
 3648 Fountain lighting fixtures
 3951 Fountain pens and fountain pen desk sets
 3585 Fountain sirup dispensing equipment
 3069 Fountain syringes, rubber
 3272 Fountains, concrete
 3431 Fountains, drinking: except mechanically refrigerated
 3585 Fountains, drinking: mechanically refrigerated
 3499 Fountains, metal (except drinking)
 3299 Fountains, plaster of paris: factory production only
 3272 Fountains, wash: precast terrazzo
 3554 Fourdrinier machines (paper manufacturing machinery)
 3496 Fourdrinier wire cloth, made from purchased wire
 3443 Fractionating columns, metal plate
 3443 Fractionating towers, metal plate
 2911 Fractionation products of crude petroleum
 3842 Fracture appliances, surgical
 3549 Frame straighteners, automobile (garage equipment)
 3999 Frames and handles, handbag and luggage: except precious metal
 3851 Frames and parts, eyeglass and spectacle
 3952 Frames for artists' canvases
 2514 Frames for box springs or bedsprings, metal
 2511 Frames for box springs or bedsprings, wood
 2426 Frames for upholstered furniture, wood
 3499 Frames, chair: metal
 2499 Frames, clothes drying: wood
 3442 Frames, door and window: metal and metal covered
 2431 Frames, door and window: wood
 3552 Frames, doubling and twisting (textile machinery)
 3999 Frames, lamp shade
 3714 Frames, motor vehicle
 3751 Frames, motorcycle and bicycle
 3931 Frames, piano back
 3999 Frames, umbrella and parasol
 2499 Frames: medallion, mirror, photograph, and picture—wood or metal
 2499 Framing pictures and mirrors for the trade
 2013 Frankfurters, canned or not canned: *mfp*
 2095 Freeze-dried coffee
 2034 Freeze-dry food processing, fruits and vegetables
 3632 Freezers, home and farm
 3551 Freezers, ice cream: commercial
 3499 Freezers, ice cream: household—metal
 3743 Freight cars and car equipment
 2221 French crepes
 2035 French dressing
 2869 Freon
 3621 Frequency converters (electric generators)

- 3825 Frequency meters: electrical, mechanical, and electronic
 3825 Frequency synthesizers
 3499 Friction material, made from powdered metal
 3292 Friction materials, asbestos: woven
 3069 Friction tape, rubber
 2211 Frieze, cotton
 2211 Friezette, cotton
 2241 Fringes, weaving
 3962 Frisket paper (artists' material)
 2899 Frit
 3312 Frogs, iron and steel: made in steel works or rolling mills
 3462 Frogs, railroad: forgings—not made in rolling mills
 3851 Fronts and temples, ophthalmic
 2541 Fronts, store: prefabricated—wood
 2024 Frozen custard
 2024 Frozen desserts
 2038 Frozen dinners, packaged
 2093 Frozen fish, packaged
 2643 Frozen food bags, *m/ym*
 2037 Frozen fruits, fruit juices, and vegetables
 2092 Frozen prepared fish
 2038 Frozen soups, except seafood
 2036 Fruit (fresh) drinks, bottled or canned
 2449 Fruit baskets, veneer and splint
 2033 Fruit butters
 2449 Fruit crates, wood—wirebound
 3523 Fruit grading, cleaning, and sorting machines
 3221 Fruit jars, glass
 2037 Fruit juice concentrates, frozen
 2087 Fruit juices, concentrated: for fountain use
 2037 Fruit juices, frozen
 2033 Fruit juices: canned, bottled, and bulk
 2065 Fruit peel products: candied, glazed, glace, and crystallized
 2033 Fruit purees
 3231 Fruit, made from purchased glass
 3523 Fruit, vegetable, berry and grape harvesting machines
 3962 Fruits, artificial and preserved: except glass
 2087 Fruits, crushed: for soda fountain use
 2034 Fruits, dried or dehydrated
 2035 Fruits, pickled and brined
 2037 Fruits, quick frozen and cold pack (frozen)
 2034 Fruits, sulphured
 2065 Fruits: candied, glazed, and crystallized
 2033 Fruits: canned, bottled, and preserved
 3589 Fryers, commercial: gas
 3634 Fryers, household: electric
 3229 Frying pans, glass and glass ceramic
 2065 Fudge (candy)
 2999 Fuel briquettes or boulets, made with petroleum binder
 2649 Fuel cell forms, cardboard: *m/ym*
 2296 Fuel cell reinforcement, cord and fabric
 3629 Fuel cells, electrochemical generators
 3674 Fuel cells, solid state
 3829 Fuel densitometers, aircraft engine
 3829 Fuel mixture indicators, aircraft engine
 2819 Fuel propellants, solid: inorganic
 2869 Fuel propellants, solid: organic
 3714 Fuel pumps, motor vehicle
 3829 Fuel system instruments, aircraft
 3714 Fuel systems and parts, motor vehicle: gas tanks, fuel pipes, and manifold
 2899 Fuel tank and engine cleaning chemicals, automotive and aircraft
 3723 Fuel tanks, aircraft: including self-sealing
 3069 Fuel tanks, collapsible: rubberized fabric
 3443 Fuel tanks, metal plate
 3829 Fuel totalizers, aircraft engine
 2819 Fuels, high energy: inorganic
 2869 Fuels, high energy: organic
 2911 Fuels, jet
 2421 Fuelwood, from mill waste
 3295 Fuller's earth, ground or otherwise treated
 2892 Fulminate of mercury (explosive compound)
 3811 Fume hoods, chemical
 3443 Fumigating chambers, metal plate
 3825 Function generators
 2879 Fungicides
 3069 Funnels, rubber
 2371 Fur apparel: capes, coats, hats, jackets, and neckpieces
 2371 Fur finishers and liners for the fur goods trade: buttonhole making, etc.
 2371 Fur plates and trimmings
 3636 Fur sewing machines
 3999 Fur stripping
 2221 Fur-type fabrics, man-made fiber
 2895 Furnace black
 3564 Furnace blowers, (blower filter units)
 3444 Furnace casings, sheet metal
 3444 Furnace flues, sheet metal

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- 3499 Furnace humidifiers, household
 3483 Furnaces, domestic: steam or hot water
 3567 Furnaces, industrial process
 3343 Furnaces, laboratory: dental
 3311 Furnaces, laboratory: except dental
 3585 Furnaces: gravity air flow
 3469 Furniture components, porcelain enameled
 2211 Furniture denim
 2426 Furniture dimension stock, hardwood
 2426 Furniture frames for upholstering, wood
 3429 Furniture hardware, including casters
 2499 Furniture inlays (veneers)
 3533 Furniture makers' machinery (wood-working)
 3499 Furniture parts, chrome
 2342 Furniture polish and wax
 3495 Furniture springs, unassembled: made from purchased wire
 2426 Furniture squares, hardwood
 3231 Furniture tops, glass: cut, beveled, and polished
 2396 Furniture trimmings, fabric: *m/psm*
 2426 Furniture turnings and carvings, wood
 3999 Furniture, beauty shop and barber shop
 2514 Furniture, club room: metal—padded or plain
 3281 Furniture, cut stone
 2599 Furniture, factory: stools, work benches, tool stands, cabinets
 3272 Furniture, garden: concrete
 2519 Furniture, household: glass, fiberglass and plastics
 2514 Furniture, household: metal—padded or plain
 2519 Furniture, household: rattan, reed, malacca, fiber, willow and wicker
 2512 Furniture, household: upholstered on wood frames
 2522 Furniture, office: metal—padded or plain
 2521 Furniture, office: wood—padded, upholstered, or plain
 2599 Furniture, restaurant: metal and wood
 2531 Furniture: church, library, school, theater, and other public buildings
 2511 Furniture: household, club room, lawn, novelty—wood, not upholstered
 3446 Furring channels
 3251 Furring tile, clay
 3999 Furs, dressed: bleached, curried, scraped, tanned and dyed
 3613 Fuse clips and blocks, electric
 3643 Fuse cutouts
 3613 Fuse devices, power: 600 volts and over
 3613 Fuse mountings, electric power
 2892 Fuse powder
 3832 Fuse setters (fire control equipment)
 2899 Fusees: highway, marine, and railroad
 3723 Fuselage assemblies, aircraft
 3483 Fuses for ammunition over 30 mm. (or over 1.18 inch)
 3613 Fuses, electric
 2892 Fuses, safety
 3483 Fuses: mine, torpedo, bomb, depth charge, and chemical warfare projectile
 2861 Fustic wood extract

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- 2211 Gabardine, cotton
 3021 Gaiters, rubber or rubber soled fabric
 2211 Galatea, cotton
 2834 Galenical preparations
 3555 Gallies and chases, printers'
 2292 Galloons, lace
 3021 Galoshes, plastics
 3021 Galoshes, rubber or rubber soled fabric
 3312 Galvanized hoops, pipes, plates, sheets, and strips: iron and steel
 2899 Galvanizing fluxes
 3547 Galvanizing lines (rolling mill equipment)
 3479 Galvanizing of iron and steel and end formed products, for the trade
 3825 Galvanometers
 2861 Gambler extract
 3949 Game calls
 2016 Game, small: frozen—*mits*
 3944 Games for children and adults: puzzles, bingo, marbles, poker chips, chess
 3999 Games, coin-operated: pinball and other
 3442 Garage doors, overhead: metal
 2431 Garage doors, overhead: wood
 3448 Garages, prefabricated or portable: metal
 3272 Garbage boxes, concrete
 3469 Garbage cans, stamped and pressed metal
 3639 Garbage disposal units, household
 3589 Garbage disposers, commercial
 2514 Garden furniture, metal
 2511 Garden furniture, wood
 2519 Garden furniture: except wood, metal, stone, and concrete
 3423 Garden hand tools
 3041 Garden hose, plastics
 3041 Garden hose, rubber

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STANDARD INDUSTRIAL CLASSIFICATION

- 3269 Garden pottery
 3999 Garden umbrellas
 3645 Garden, patio, walkway and yard lighting fixtures: electric
 3963 Garlands, wreaths and sprays: made from tree boughs, cones, etc.
 2643 Garment bags (throwaway type of plastic film or paper), *m/ym*
 3496 Garment hangers, made from purchased wire
 2499 Garment hangers, wood
 3111 Garment leather
 2542 Garment racks, metal
 2541 Garment racks, wood
 2392 Garment storage bags made of materials except paper
 2643 Garment storage bags, *m/ym*
 2396 Garments, leather and sheep-lined
 3291 Garnet abrasives
 3291 Garnet paper
 3552 Garnetting machines, textile
 2294 Garnetting of textile waste and rags
 2339 Garter belts
 2389 Garters
 3443 Gas absorbers
 3811 Gas analyzing equipment
 3519 Gas and diesel engine rebuilding
 3623 Gas and liquid analysis instruments, industrial process type
 3673 Gas and vapor tubes
 3822 Gas burner automatic controls, except valves
 3433 Gas burners, domestic
 3842 Gas capes (cold climate individual protective covers)
 3563 Gas compressors, for general industrial use
 3823 Gas flow computers, industrial process type
 3569 Gas generators
 3433 Gas heaters, room
 3443 Gas holders, metal plate
 3433 Gas infra-red heating units
 3648 Gas lighting fixtures
 3842 Gas masks
 3321 Gas pipe, cast iron
 3569 Gas producers (machinery)
 3631 Gas ranges, domestic
 3569 Gas separators (machinery)
 3443 Gas tanks, metal plate
 3714 Gas tanks, motor vehicle
 3511 Gas turbine generator set units, complete
 3511 Gas turbines and parts, except aircraft type
 3511 Gas turbines, mechanical drive
 3494 Gas valves and parts, metal
 3496 Gas welding rods, made from purchased wire
 3533 Gas well machinery and equipment
 3433 Gas-oil burners, combination
 3312 Gas, coal: derived from chemical recovery coke ovens
 2911 Gas, refinery or still oil: produced in petroleum refineries
 2369 Gases, chemical warfare
 2369 Gases, fluorinated hydrocarbon
 3313 Gases, industrial: compressed, liquefied, or solid—*m/ym*
 2911 Gases, liquefied petroleum
 **** Gases, natural—see nonmanufacturing
 3293 Gaskets, regardless of material
 3824 Gasometers: domestic, large capacity, industrial
 2911 Gasoline blending plants
 3824 Gasoline dispensing meters (except pumps)
 3599 Gasoline filters, internal combustion engine
 3586 Gasoline measuring and dispensing pumps
 2911 Gasoline, except natural gasoline
 **** Gasoline, natural—see nonmanufacturing
 2269 Gassing yarn
 3841 Gastrosopes
 3569 Gate and bridge machinery, hydraulic
 3452 Gate hooks
 3441 Gates, dam: metal plate
 3496 Gates, fence: made from purchased wire
 3523 Gates, holding (farm equipment)
 3446 Gates, ornamental metal
 3545 Gauge blocks
 3829 Gauges except electric, motor vehicle: oil pressure, water temperature
 3545 Gauges except optical (machine tool accessories)
 3824 Gauges for computing pressure-temperature corrections
 3829 Gauging instruments, thickness: ultrasonic
 2211 Gauze, *mitse*
 3842 Gauze, surgical: not made in weaving mills
 2499 Gavels, wood
 3541 Gear chamfering machines (machine tools)

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- 3541 Gear cutting and finishing machines
 3423 Gear pullers (hand tools)
 3542 Gear rolling machines
 3541 Gear tooth grinding machines (machine tools)
 3482 Gears, forged steel: not made in rolling mills
 3714 Gears, motor vehicle
 3751 Gears, motorcycle and bicycle
 3728 Gears, power transmission: aircraft
 3566 Gears, power transmission: except motor vehicle and aircraft
 2016 Geese, dressed and packed
 3629 Gelger counters
 3678 Gelger Mueller tubes
 2899 Gelatin capsules, empty
 2099 Gelatin dessert preparations
 3555 Gelatin rolls, used in printing
 2833 Gelatin, vegetable (agar-agar)
 2899 Gelatin: edible, technical, photographic, and pharmaceutical
 3915 Gems, real and imitation: preparation for settings
 3411 General line cans, metal
 3621 Generating apparatus and parts, electrical: except auto and arc welding
 3613 Generator control and metering panels
 3511 Generator set units, turbine: complete—steam, gas, and hydraulic
 3621 Generator sets: gasoline, diesel, and dual fuel
 3612 Generator voltage regulators, electric induction and step type
 3623 Generators (separate), for arc welders
 3621 Generators and sets, electric: except auto, welding and turbo-generators
 3694 Generators, aircraft and automotive
 3621 Generators for gas-electric and oil-electric vehicles
 3621 Generators for storage battery chargers, except auto and aircraft
 3569 Generators, gas
 3811 Generators, magnetic idealization
 3489 Generators, smoke (ordnance)
 3693 Generators, X-ray
 3569 Generators: steam, liquid oxygen and nitrogen
 3662 Geophysical and meteorological electronic equipment
 2221 Georgettes
 2869 Geraniol, synthetic
 3339 Germanium refining, primary
 3341 Germanium refining, secondary
 2849 Gift wrappers, paper: *mfp*
 2789 Gilding books, cards, or paper
 3423 Gimlets (edge tools)
 2241 Glmps, *mitae*
 2885 Gin (alcoholic beverage)
 2886 Ginger ale, bottled or canned
 2045 Gingerbread mix, prepared: *mfp*
 2211 Gingham
 3559 Ginning machines, cotton
 2259 Girdle blanks, elastic: *mitae*
 2259 Girdles (elastic) and other foundation garments, *mitae*
 2342 Girdles, *mfp*
 2065 Glace fruits and nuts
 2833 Gland derivatives: bulk, uncompounded
 3229 Glass and glassware: for industrial, scientific, and technical use
 3229 Glass blanks for electric light bulbs
 3229 Glass brick
 2221 Glass broad woven fabrics
 3851 Glass eyes
 3255 Glass house refractories
 3559 Glass making machinery: blowing, molding, forming, grinding, etc.
 2241 Glass narrow fabrics
 2211 Glass toweling, cotton
 3296 Glass wool
 3211 Glass, colored: cathedral and antique
 3211 Glass, flat
 3231 Glass, scientific apparatus: for druggists hospitals, laboratories—*mfp*
 3231 Glass, sheet: bent—made from purchased glass
 3211 Glass, tempered: *mitae*
 3231 Glass, tempered: *mfp*
 3231 Glass: cut, ground, leaded, laminated, ornamented, and tinted—*mfp*
 3832 Glasses, field or opera
 3851 Glasses, sun or glare
 2643 Glassine bags, *mfp*
 2621 Glassine wrapping paper, *mitae*
 3231 Glassware, cut and engraved, made from purchased glass
 3231 Glassware, cutting and engraving
 3231 Glassware, decorated: chipped, engraved, sandblasted, etc.—*mfp*
 3229 Glassware, except glass containers for packing, bottling, and home canning
 3221 Glassware, for packing, bottling, and home canning
 3229 Glassware: art, decorative, and novelty

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STANDARD INDUSTRIAL CLASSIFICATION

- 2819 Glauber's salt
 2641 Glazed paper (except photographic, carbon, and abrasive paper) *mypm*
 2371 Glazing furs
 3811 Glide slope indicators
 3721 Gliders (aircraft)
 2514 Gliders (furniture), metal: padded or plain
 2741 Globe covers (maps): publishing and printing, or publishing only
 3999 Globes, geographical
 2211 Glove fabrics, cotton: *mitse*
 3111 Glove leather
 2241 Glove lining fabrics
 2381 Glove linings, except fur
 2371 Glove linings, fur
 2399 Glove mending on factory basis
 2381 Gloves and mittens: except knit, all-leather, rubber, plastic, and safety
 3079 Gloves and mittens: plastics
 3151 Gloves, leather
 2259 Gloves, made in knitting mills
 3842 Gloves, safety: all material
 3949 Gloves, sport and athletic: boxing, baseball, handball, etc.
 3999 Gloves: surgeons', electricians', household, etc.—rubber
 3641 Glow lamps
 2699 Glue size
 3843 Glue, dental
 2991 Glue, except dental: animal, vegetable, fish, casein, and synthetic resin
 2946 Gluten feed
 2946 Gluten meal
 2841 Glycerin, crude and refined: from fats—except synthetic
 2999 Glycerin, except from fats (synthetic)
 3596 Go-devils (hydraulic crane, pneumatic tired)
 3229 Goblets, glass
 3944 Gocarts, children's
 3799 Gocarts, except children's
 3951 Goggles: sun, safety, industrial, underwater, etc.
 3356 Gold and gold alloy bars, sheets, strip, and tubing
 3497 Gold beating (manufacturing of gold leaf and foil)
 3497 Gold foil and leaf, not made in rolling mills
 2893 Gold ink
 3952 Gold or bronze mixtures, powders, paints, and sizes: artists'
 3471 Gold plating, for the trade
 3339 Gold refining, primary
 3356 Gold rolling and drawing
 3341 Gold smelting and refining, secondary
 3999 Gold stamping for the trade, except books
 2789 Gold stamping on books
 3843 Gold, dental
 3949 Golf carts, hand
 3949 Golfing equipment: caddy carts and bags, clubs, tees, balls, etc.
 3999 Gongs, electric
 3423 Gouges, woodworking
 3723 Governors, aircraft propeller feathering
 3519 Governors, diesel engine
 3714 Governors, motor vehicle
 3519 Governors, pump: for diesel engines
 3599 Governors, pump: for gas machines
 3511 Governors, steam
 3531 Grader attachments, elevating
 3531 Graders, motor
 3531 Graders, road (construction machinery)
 2833 Grading of drugs and herbs
 3523 Grading, cleaning, and sorting machines: fruit, grain, and vegetable
 3822 Gradual switches, pneumatic
 3842 Grafts, artificial: for surgery—made of braided or mesh artificial fibers
 2041 Graham flour
 2085 Grain alcohol for medicinal and beverage purposes
 2869 Grain alcohol, industrial (nonbeverage)
 2041 Grain cereals, cracked: *mitse*
 3523 Grain drills, including legume planters (agricultural machinery)
 3523 Grain grading, cleaning, and sorting machines
 2499 Grain measures, wood: turned and shaped
 3551 Grain mill machinery
 3523 Grain stackers
 2082 Grain, brewers'
 3291 Grains, abrasive: natural and artificial
 3281 Granite: for building, ornamental, paving, and other uses—cut and shaped
 2041 Granular wheat flour
 2063 Granulated beet sugar
 2062 Granulated cane sugar, made from purchased sugar
 2061 Granulated cane sugar, made from sugar-cane
 2399 Grapefruit oil
 2782 Graph paper, ruled
 3861 Graphic arts plates, sensitized
 3825 Graphic recording meters, electric

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3624 Graphite electrodes and contacts, electric
 3295 Graphite, natural: ground, pulverized, refined, or blended
 3531 Grapples: rock, wood, etc.
 3524 Grass catchers, lawn mower
 3423 Grass hooks
 3962 Grasses, artificial and preserved: except glass
 3231 Grasses, artificial: made from purchased glass
 3446 Gratings (open steel flooring)
 3832 Gratings, diffraction
 3446 Gratings, tread: fabricated metal
 3272 Grave markers, concrete
 3272 Grave vaults, concrete
 3995 Grave vaults, metal
 3299 Gravel painting
 2893 Gravure ink
 3555 Gravure presses
 2754 Gravure printing
 3321 Gray iron castings
 3321 Gray iron foundries
 2077 Grease and tallow rendering
 3599 Grease cups, metal
 3586 Grease guns (lubricators)
 3293 Grease retainers, leather
 3293 Grease seals, asbestos
 3272 Grease traps, concrete
 2299 Grease, wool
 2621 Greaseproof wrapping paper, *mifpm*
 2992 Greases, lubricating: not made in petroleum refineries
 2843 Greases, sulfonated
 2911 Greases, lubricating: produced in petroleum refineries
 2771 Greeting cards, except hand painted: printed, engraved, lithographed, etc.
 3484 Grenade launchers
 3483 Grenades and parts
 3999 Grenades, hand (fire extinguishers)
 3634 Griddles and grills, household: electric
 3699 Grids, electric
 3496 Grilles and grillework, woven wire: made from purchased wire
 3446 Grillework, ornamental metal
 3523 Grinders and crushers, feed (agricultural machinery)
 3551 Grinders, food: commercial types
 3546 Grinders, pneumatic and electric: portable (metalworking machinery)
 3546 Grinders, snagging
 3531 Grinders, stone: portable
 3532 Grinders, stone: stationary
 3291 Grinding balls, ceramic
 3599 Grinding castings for the trade
 3541 Grinding machines
 3269 Grinding media, pottery
 2833 Grinding of drugs and herbs
 3999 Grinding purchased nut shells
 3291 Grindstones, artificial
 3869 Grips and handles, rubber
 3291 Grit, steel
 2041 Grits and flakes, corn: for brewers' use
 2643 Grocers' bags, *mifpm*
 3496 Grocery carts, made from purchased wire
 3869 Grommets, rubber
 3541 Grooving machines (machine tools)
 2211 Grosgrain, cotton
 3643 Ground clamps (electric wiring devices)
 3231 Ground glass, made from purchased glass
 2621 Groundwood paper
 2899 Grouting material (concrete mending compound)
 2879 Growth regulants, agricultural
 3444 Guard rails, highway: sheet metal
 3446 Guards, bannisters, railings, etc.: made from pipe
 3496 Guards, made from purchased wire
 3949 Guards: football, basketball, soccer, lacrosse, etc.
 3764 Guided missile engines and engine parts
 3761 Guided missiles, complete
 2741 Guides: printing and publishing, or publishing only
 3931 Guitars and parts, electric and nonelectric
 2861 Gum naval stores, processing but not gathering or warehousing
 2899 Gum sizes
 2754 Gummed labels and seals: gravure printing
 2751 Gummed labels and seals: letterpress and screen printing
 2641 Gummed paper, *mifpm*
 3579 Gummed tape moisteners, for store and office use
 2641 Gummed tape, cloth and paper base: *mifpm*
 3489 Gun barrels, over 30 mm. (or over 1.18 inch)
 3484 Gun barrels, 30 mm. (or 1.18 inch) and below
 3489 Gun carriages, mounts, and parts for guns over 30 mm. (or over 1.18 inch)
 3949 Gun cases (sporting equipment)
 3573 Gun data computers

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STANDARD INDUSTRIAL CLASSIFICATION

3832 Gun fire adjustment boards (sighting and fire control equipment)
3312 Gun forgings, iron and steel: made in steel works or rolling mills
3489 Gun limbers
3484 Gun magazines, 30 mm. (or 1.18 inch) and below
3489 Gun sights, except optical: for guns over , 30 mm. (or over 1.18 inch)
3832 Gun sights, optical
3484 Gun sights, except optical: 30 mm. (or 1.18 inch) and below
2899 Gun slushing compounds
3495 Gun springs, precision: made from purchased wire
2426 Gun stocks, wood
3489 Gun turrets and parts for artillery over 30 mm. (or over 1.18 inch)
3674 Gunn effect device
3297 Gunning mixes, nonclay
2892 Gunpowder
3423 Guns, calking
3489 Guns, catapult
3586 Guns, grease (lubricators)
3489 Guns, over 30 mm. (or over 1.18 inch)
3546 Guns, pneumatic: chip removal
3944 Guns, toy
3484 Guns, 30 mm. (or 1.18 inch) and below
3842 Gut sutures, surgical
3069 Gutta percha compounds
3079 Gutters, fiberglass
3079 Gutters, plastic: glass fiber reinforced
3444 Gutters, sheet metal
3949 Gymnasium and playground equipment
2329 Gymnasium clothing: men's, youths', and boys'
3842 Gynecological supplies and appliances
3275 Gypsum products: block, board, plaster, rock, tile, etc.
3811 Gyro gimbals
3811 Gyrocompasses
3811 Gyropilots
3811 Gyroscopes

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3811	Haemoglobinometers
3523	Hair clippers for animal use, hand and electric
3999	Hair clippers for human use, hand and electric
3999	Hair curlers, designed for beauty parlors

3634 Hair curlers, electric
3964 Hair curlers, except equipment designed for beauty parlor use
3069 Hair curlers, rubber
2844 Hair dressings, dyes, bleaches, tonics, and removers
3999 Hair driers, designed for beauty parlors
3634 Hair driers, electric: except equipment designed for beauty parlor use
3999 Hair goods: braids, nets, switches, toupees, wigs, etc.
3999 Hair nets
3991 Hair pencils (artists' brushes)
2293 Hair, curled: for upholstery, pillow, and quilt filling
3999 Hair, dressing of, for the trade
2231 Haircloth of wool, mohair, and similar fibers
3999 Hairpin mountings
3964 Hairpins, except rubber
3069 Hairpins, rubber
2793 Halftones (photoengraving plates)
2753 Halftones, engraved
3674 Hall effect devices
2646 Halloween lanterns, papier mache: *m/fpm*
3199 Halters (harness)
2065 Halvah
2013 Ham, canned: *m/fpm*
2013 Ham: boiled, boneless, roasted, and smoked—*m/fpm*
3523 Hammer and roughage mills (agricultural machinery)
3462 Hammer forgings, not made in rolling mills
3531 Hammer mills (rock and ore crushing machines), portable
3532 Hammer mills (rock and ore crushing machines), stationary
3423 Hammers (hand tools)
3542 Hammers, drop: for forging and shaping metal
2499 Hammers, meat: wood
3931 Hammers, piano
3531 Hammers, pile driving
3542 Hammers, power (forging machinery)
3546 Hammers: portable electric and pneumatic chipping, riveting, calking, etc.
2514 Hammocks, metal or fabric and metal combination
2399 Hammocks, fabric: *m/fpm*
2449 Hampers, fruit and vegetable: veneer and splint

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2499 Hampers, laundry: rattan, reed, splint, veneer, and willow
 3444 Hampers, laundry: sheet metal
 2653 Hampers, shipping: paperboard and solid fiber—*mfp*
 2655 Hampers, shipping: vulcanized fiber—*mfp*
 2011 Hams and picnics, *mitse*
 2399 Hand crocheted ware
 2253 Hand knitting of outerwear, for the trade
 2284 Hand knitting thread: cotton, silk, and man-made fiber
 3843 Hand pieces and parts, dental
 3953 Hand stamps, stencils, and brands
 3546 Hand tools, power driven: woodworking or metalworking
 2399 Hand woven apparel
 2299 Hand woven fabrics
 3999 Handbag frames
 3111 Handbag leather
 2396 Handbag linings, *mfp*
 3911 Handbags, precious metal
 3171 Handbags, women's: of all materials except precious metal
 3429 Handcuffs
 2211 Handkerchief fabrics, cotton
 2389 Handkerchiefs, except paper
 2647 Handkerchiefs, paper: *mfp*
 3751 Handle bars, motorcycle and bicycle
 2426 Handle blanks, wood
 2411 Handle bolts, wood: hewn
 2426 Handle stock, sawed or planed
 3079 Handles, brush and tool: plastics
 3261 Handles, faucet: vitreous china and earthenware
 3069 Handles, rubber
 3999 Handles, umbrella and parasol: except precious metal
 3911 Handles, umbrella and parasol: gold and silver
 3199 Handles, whip and luggage: leather
 2499 Handles, wood: turned and shaped
 3442 Hangar doors, sheet metal covered
 3496 Hangers, garment: made from purchased wire
 2499 Hangers, garment: wood
 3861 Hangers: photographic film, plate, and paper
 2621 Hanging paper (wallpaper stock), *mitse*
 2298 Hard fiber cordage and twine
 3069 Hard rubber products
 3069 Hard surface floor coverings: rubber
 3996 Hard surfaced floor coverings, except rubber and cork
 2499 Hardboard, tempered or untempered
 2399 Hardening compounds, concrete
 3398 Hardening of metal for the trade
 3829 Hardness testing equipment
 3496 Hardware cloth, woven wire: made from purchased wire
 3079 Hardware, plastics
 3643 Hardware, pole line
 3999 Hardware, stage
 2426 Hardwood dimension
 2861 Hardwood distillates
 3931 Harmonicas
 3199 Harness and harness parts
 3679 Harness assemblies, for electronic use: wire and cable
 2842 Harness dressing
 3429 Harness hardware
 3111 Harness leather
 3199 Harness, dog
 3694 Harness, wiring for motor vehicles: ignition
 3931 Harps and parts
 3931 Harpsichords
 3523 Harrows: disc, spring, tine, etc.
 2352 Harvest hats, straw
 3523 Harvesting machines
 3634 Hassock fans, electric
 2392 Hassocks
 2241 Hat band fabrics
 3999 Hat blocks and display forms
 2352 Hat bodies: fur felt, straw, and wool felt
 3161 Hat boxes, except paper or paperboard
 2396 Hat findings, men's
 2396 Hat linings and trimmings, men's
 3559 Hat making and hat renovating machinery
 3423 Hatchets
 2352 Hats and caps: except millinery and paper—*mfp*
 3942 Hats, doll
 2371 Hats, fur
 2399 Hats, hand crocheted
 2253 Hats, *mitse*
 2649 Hats, paper novelties: *mfp*
 2351 Hats, trimmed: women's, misses', and children's
 2352 Hats: fur felt, straw and wool felt—men's and boys'
 2396 Hatters' fur
 3523 Hay balers and presses

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STANDARD INDUSTRIAL CLASSIFICATION

- 3523 Hay conditioners
 3423 Hay forks
 3423 Hay knives
 3523 Haying machines: mowers, rakes, loaders, stackers, balers, presses, etc.
 2013 Head cheese, *mfgm*
 2044 Head rice
 2511 Headboards, wood
 3542 Headers
 2411 Heading bolts, wood: hewn
 2429 Heading, barrel (cooperage stock): sawed or split
 3647 Headlights (fixtures) for motor vehicles, locomotives, etc.
 3679 Headphones, radio
 3931 Heads, banjo and drum
 3661 Headsets, telephone
 3545 Headstocks, lathe (machine tool accessories)
 2253 Headwear, *misc*
 2369 Headwear: girls', children's, and infants'—*mfgm*
 2032 Health foods, canned
 3641 Health lamps, infra-red and ultra-violet
 3842 Hearing aids
 3713 Hearse bodies
 3711 Hearses (motor vehicles)
 3693 Heart-lung machine
 3662 Heat emission operating apparatus
 3443 Heat exchangers: industrial, scientific, and nuclear
 2899 Heat insulating compounds
 3292 Heat insulating materials except felt: for covering boilers, pipes, etc.
 3361 Heat sensitized paper made from purchased paper
 3443 Heat transfer drives (finned tubing)
 3398 Heat treating of metal for the trade
 3567 Heat treating ovens
 2899 Heat treating salts
 3041 Heater hose, plastics
 3041 Heater hose, rubber
 3269 Heater parts, pottery
 3255 Heater radiants, clay
 3634 Heaters, immersion: household—electric
 3714 Heaters, motor vehicle
 3634 Heaters, space: electric
 3433 Heaters, space: except electric
 3569 Heaters, swimming pool: electric
 3433 Heaters, swimming pool: oil or gas
 3634 Heaters, tape
 3585 Heating and air conditioning combination units
 3433 Heating apparatus, except electric or warm air
 3567 Heating equipment, induction
 3634 Heating pads, electric
 3567 Heating units and devices, industrial: electric
 3634 Heating units, baseboard or wall: electric (radiant heating element)
 3634 Heating units, for electric appliances
 3743 Heating units, for railroad cars
 2819 Heavy water
 3552 Heddles for loom harnesses, wire
 3421 Hedge shears and trimmers, except power
 3524 Hedge trimmers, electric
 3131 Heel caps, leather or metal
 3131 Heel lifts, leather
 3131 Heels, boot and shoe: finished wood or leather
 3079 Heels, boot and shoe: plastics
 3069 Heels, boot and shoe: rubber, composition, and fiber
 3493 Helical springs, hot wound: for railroad equipment, vehicles, etc.
 3721 Helicopters
 2813 Helium
 3949 Helmets, athletic
 3199 Helmets, except athletic: leather
 2352 Helmets, jungle cloth: wool lined
 3842 Helmets, space
 3469 Helmets, steel
 2861 Hemlock extract
 3841 Hemodialysis apparatus
 2299 Hemp yarn, thread, roving, and textiles
 2395 Hemstitching, for the trade
 2833 Herb grinding, grading, and milling
 2879 Herbicides
 3679 Hermetic seals, for electronic equipment
 2077 Herring oil
 2091 Herring: smoked, salted, dried, and pickled
 2869 Hexamethylenediamine
 2869 Hexamethylenetetramine
 2211 Hickory stripes, cotton
 2011 Hides, cured or uncured: *misc*
 3111 Hides: tanning, currying, and finishing
 2511 High chairs, children's: wood
 3542 High energy rate metal forming machines
 2892 High explosives
 3313 High percentage ferroalloys, not produced in blast furnaces
 3313 High percentage nonferrous additive alloys, except copper

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- | | |
|---|--|
| 2819 High purity grade chemicals, inorganic:
refined from technical grades | 3541 Honing and lapping machines |
| 2869 High purity grade chemicals, organic:
refined from technical grades | 3545 Honing heads |
| 3297 High temperature cement, nonclay | 3443 Hoods, industrial: metal plate |
| 3297 High temperature mortar, nonclay | 3714 Hoods, motor vehicle |
| 3443 High vacuum coaters, metal plate | 3444 Hoods, range: sheet metal |
| 3441 Highway bridge sections, prefabricated | 2279 Hooked rugs |
| 2899 Highway fuses | 3964 Hooks and eyes |
| 3444 Highway guard rails, sheet metal | 3443 Hooks, crane: laminated plate |
| 3662 Highway signals, electric | 3964 Hooks, crochet |
| 3429 Hinge tubes | 3949 Hooks, fishing |
| 3429 Hinges | 3452 Hooks, gate |
| 3489 Hispano Suiza guns | 3452 Hooks, screw |
| 3944 Hobbyhorses | 3423 Hooks: bush, grass, baling, and husking |
| 3545 Hobs | 3312 Hoops, galvanized iron and steel |
| 3949 Hockey equipment, except uniforms | 3312 Hoops, iron and steel: made in steel
works or hot rolling mills |
| 3423 Hoes, garden and masons' | 3499 Hoops, steel: other than wire |
| 3523 Hog feeding, handling, and watering
equipment | 2429 Hoops, wood: for tight or slack cooper-
age—sawed or split |
| 3496 Hog rings, made from purchased wire | 2339 Hoovers, women's and misses' |
| 2011 Hog slaughtering plants | 3545 Hopper feed devices |
| 2449 Hogsheads, wood: coopered | 3537 Hoppers, end dump |
| 3536 Hoisting slings | 3443 Hoppers, metal plate |
| 3536 Hoists for automobile wreckers | 3444 Hoppers, sheet metal |
| 3537 Hoists, aircraft loading | 3811 Horizon flight indicators |
| 3536 Hoists, except aircraft loading | 2834 Hormone preparations |
| 3536 Hoists, hand | 2833 Hormones and derivatives |
| 3536 Hoists, mine | 2879 Hormones, plant |
| 3999 Holders, cigar and cigarette | 3714 Horns, motor vehicle |
| 3952 Holders, pencil | 3944 Horns, toy |
| 3841 Holders, surgical needle | 3429 Horse bits |
| 3861 Holders: photographic film, plate, and
paper | 2399 Horse blankets, <i>m/ps</i> |
| 3914 Hollow ware: silver, nickel silver, pewter,
stainless steel, and plated | 3199 Horse boots and muzzles |
| 3199 Holsters, leather | 2047 Horse meat: canned, fresh, or frozen |
| 2844 Home permanent kits | 2824 Horsehair, artificial: nylon |
| 3651 Home recorders, cassette, cartridge and
reel | 2823 Horsehair, artificial: rayon |
| 3541 Home workshop machine tools, metal-
working | 2035 Horseradish, prepared |
| 2041 Hominy grits, except breakfast food | 3462 Horseshoe calks, forged: not made in
rolling mills |
| 2043 Hominy grits, prepared as cereal break-
fast food | 3315 Horseshoe nails |
| 2033 Hominy, canned | 3462 Horseshoes, not made in rolling mills |
| 3291 Hones | 3494 Hose and tube assemblies: fluid power,
hydraulic and pneumatic |
| 2099 Honey, strained and bottled | 3429 Hose clamps |
| 2649 Honeycomb core and board, <i>m/ps</i> | 3429 Hose couplings |
| 3999 Honeycomb foundations (beekeepers' sup-
plies) | 2241 Hose fabric, tubular |
| 3469 Honeycombed metal | 2389 Hose supporters |
| | 3569 Hose, fire: except rubber |
| | 3599 Hose, flexible metallic |
| | 3041 Hose, pneumatic: air brake, air line,
etc.—rubber or rubberized fabric |
| | 3041 Hose: cotton fabric, rubber lined |

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STANDARD INDUSTRIAL CLASSIFICATION

- 3041 Hose: fire, garden, vacuum cleaner, heater, automobile, etc.—rubber
 3041 Hose: garden, vacuum cleaner, heater, automobile, etc.—plastics
 3999 Hosiery kits, sewing and mending
 3552 Hosiery machines
 3842 Hosiery, elastic: orthopedic
 2252 Hosiery, except women's and misses' full length and knee length hosiery
 3842 Hosiery, support
 2251 Hosiery, women's and misses' full length and knee length
 2599 Hospital beds
 3537 Hospital dollies
 2339 Hospital garments, women's
 2328 Hospital service apparel, washable: men's
 2392 Hospital sheets, nonwoven textiles
 3361 Hospital utensils, cast aluminum
 3469 Hospital utensils, porcelain enameled
 3479 Hot dip coating of metals and formed products, for the trade
 3634 Hot plates, electric
 3312 Hot rolled iron and steel products
 3255 Hot top refractories, clay
 3297 Hot top—nonclay refractory
 3639 Hot water heaters, household
 3493 Hot wound springs, except wire springs
 3262 Hotel tableware and kitchen articles, vitreous china
 2392 House furnishings, except curtains and draperies
 3142 House slippers
 3792 House trailers except as permanent dwellings
 3732 Houseboats, building and repairing
 2384 Housecoats, except children's and infants'—*mfgpm*
 2253 Housecoats, *mitse*
 2369 Housecoats: girls', children's, and infants'—*mfgpm*
 2335 Housedresses—*mfgpm*
 2842 Household bleaches, dry or liquid
 3991 Household brooms and brushes
 3263 Household earthenware, semivitreous
 2514 Household furniture upholstered on metal frames
 2519 Household furniture, glass and plastics
 2514 Household furniture, metal: padded or plain
 2512 Household furniture, upholstered on wood frames
 2511 Household furniture, wood: except upholstered
 2519 Household furniture: rattan, reed, malacca, fiber, willow, and wicker
 3069 Household gloves, rubber
 2379 Household insecticides
 3262 Household tableware and kitchen articles, vitreous china
 2899 Household tints and dyes
 3361 Household utensils, cast aluminum
 3469 Household utensils, porcelain enameled
 3469 Household utensils, stamped and pressed metal: except cast aluminum
 2499 Household woodenware
 2452 Houses, portable: prefabricated wood
 3448 Houses, prefabricated or portable: metal
 3443 Housing cabinets for radium, metal plate
 3272 Housing components, prefabricated: concrete
 3443 Housings, pressure
 3489 Howitzers, over 30 mm. (or over 1.18 inch)
 3559 Hub and die cutting machine (jewelers')
 3465 Hub caps, automobile: stamped
 3728 Hubs, aircraft propeller
 2499 Hubs, wood
 2211 Huck toweling
 3523 Hulling machinery, agricultural
 3634 Humidifiers, electric: household
 3499 Humidifiers, household furnace
 3585 Humidifying equipment, except household furnace or room electric
 3822 Humidistats: wall, duct, and skeleton
 3822 Humidity controls, air conditioning types
 3829 Humidity instruments, except industrial process and air-conditioning type
 3823 Humidity instruments, industrial process type
 2329 Hunting coats and vests, men's
 3421 Hunting knives
 3423 Husking hooks
 3674 Hybrid integrated circuits
 3321 Hydrants, water: cast iron
 2819 Hydrated alumina silicate powder
 3274 Hydrated lime
 3714 Hydraulic fluid power pumps, for automotive steering mechanisms
 2869 Hydraulic fluids, synthetic base
 3494 Hydraulic hose assemblies
 3569 Hydraulic motors
 3728 Hydraulic pumps, valves, and cylinders: aircraft

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3511 Hydraulic turbine generator set units, complete
 3511 Hydraulic turbines
 2869 Hydrazine
 2911 Hydrocarbon fluid, made in petroleum refineries
 2869 Hydrocarbon gases, fluorinated
 2819 Hydrochloric acid
 2819 Hydrocyanic acid
 2819 Hydrofluoric acid
 2899 Hydrofluoric acid compound, for etching and polishing glass
 3732 Hydrofoil boats
 3731 Hydrofoil vessels
 2813 Hydrogen
 3811 Hydrogen ion equipment, colorimetric
 2819 Hydrogen peroxide
 2819 Hydrogen sulfide
 3561 Hydrojet marine engine units
 2046 Hydrol
 3829 Hydrometers, except industrial process type
 3823 Hydrometers, industrial process type
 3822 Hydronic circulator control, automatic
 3822 Hydronic limit control
 3822 Hydronic pressure and temperature controls
 3662 Hydrophones
 3443 Hydropneumatic tanks, metal plate
 2865 Hydroquinone
 2819 Hydrosulfites
 3842 Hydrotherapy equipment
 3829 Hygrometers, except industrial process type
 3823 Hygrometers, industrial process types
 2822 Hypalon
 3841 Hypodermic needles and syringes
 2819 Hypophosphites
- I**
- 3069 Ice bags, rubber or rubberized fabric
 3822 Ice bank controls
 3632 Ice boxes, household: metal or wood
 3585 Ice boxes, industrial: metal or wood
 3429 Ice chests or coolers, portable: except foam plastic
 3079 Ice chests or coolers, portable: foam plastics
 3411 Ice cream cans, metal
 2052 Ice cream cones and wafers
 3469 Ice cream dippers
 3499 Ice cream freezers, household: metal
 3551 Ice cream manufacturing machinery
 2023 Ice cream mix, unfrozen: made in condensed and evaporated milk plants
 2024 Ice cream: bulk, packaged, molded, on sticks, etc.
 3569 Ice crushers (machinery)
 2097 Ice cubes
 3822 Ice maker controls
 3585 Ice making machinery
 2023 Ice milk mix, unfrozen: made in condensed and evaporated milk plants
 2024 Ice milk: bulk, packaged, molded, on sticks, etc.
 2097 Ice plants, operated by public utilities
 3949 Ice skates
 2097 Ice, manufactured or artificial: except dry ice
 2024 Ices and sherbets
 3079 Identification cards, plastics
 3999 Identification plates
 3999 Identification tags, except paper
 2899 Igniter grains, boron potassium nitrate
 3483 Igniters, tracer: for ammunition over 80 mm. (or over 1.18 inch)
 3694 Ignition apparatus for internal combustion engines
 3694 Ignition cable sets or wire assemblies for internal combustion engines
 3822 Ignition controls for gas appliances and furnaces, automatic
 3694 Ignition systems, high frequency
 3825 Ignition testing instruments
 3612 Ignition transformers
 3229 Illuminating glass: light shades, reflectors, lamp chimneys, and globes
 2911 Illuminating oil, produced in petroleum refineries
 3299 Images, small: gypsum, clay, or papier mache—factory production only
 3634 Immersion heaters, household: electric
 3679 Impedance conversion units, high frequency
 3825 Impedance measuring equipment
 3824 Impeller and counter driven flow meters
 2295 Impregnating and coating of fabrics, except rubberizing
 3843 Impression material, dental
 2754 Imprinting: gravure
 2751 Imprinting: letterpress and screen
 3822 In-built thermostats, filled system and bimetal types
 3641 Incandescent filament lamp bulbs, complete

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STANDARD INDUSTRIAL CLASSIFICATION

- 3559 Incandescent lamp making machinery
 2899 Incense
 3822 Incinerator control systems, residential and commercial types
 3272 Incinerators, concrete
 3433 Incinerators, metal: domestic and commercial
 3523 Incubators, except laboratory and infant
 3842 Incubators, infant
 3811 Incubators, laboratory
 2845 Index and other cut cards, *mfp*
 3949 Indian clubs
 3825 Indicating instruments, electric
 3811 Indicator testers, turntable
 2865 Indicators, chemical
 2819 Indium chloride
 3567 Induction heating equipment
 3677 Inductors, electronic
 2869 Industrial alcohol, denatured (non-beverage)
 2296 Industrial belting reinforcement, cord and fabric
 3991 Industrial brooms and brushes
 3673 Industrial electron tubes
 2328 Industrial garments
 3229 Industrial glassware and glass products, pressed or blown
 3231 Industrial glassware, made from purchased glass
 3646 Industrial lighting fixtures
 3743 Industrial locomotives and parts, electric or nonelectric
 3646 Industrial mercury lighting fixtures
 3544 Industrial molds
 2869 Industrial organic cyclic compounds
 2842 Industrial plant disinfectants and odorants
 3823 Industrial process control instruments
 3567 Industrial process furnaces and ovens, except bakery ovens
 3576 Industrial scales
 2899 Industrial sizes
 3537 Industrial truck cranes
 3662 Inertial guidance systems
 3842 Infant incubators
 2252 Infants' and children's hosiery
 2043 Infants' foods, cereal type
 2369 Infants' headwear, trimmed and untrimmed
 3823 Infra-red instruments, industrial process type
 3648 Infra-red lamp fixtures
 3641 Infra-red lamps
 3662 Infra-red object detection equipment
 3567 Infra-red ovens, industrial
 3674 Infra-red sensors, solid state
 3321 Ingot molds and stools
 3355 Ingot, aluminum: made in rolling mills
 3334 Ingots, aluminum
 3331 Ingots, copper
 3332 Ingots, lead
 3339 Ingots, magnesium
 3341 Ingots, nonferrous: smelting and refining—secondary
 3312 Ingots, steel
 3333 Ingots, zinc
 3841 Inhalation therapy equipment
 3841 Inhalators, surgical and medical
 3079 Injection molding of plastics, for the trade
 2899 Ink and writing fluids, except printing
 2842 Ink eradicators
 2842 Ink, burnishing
 3952 Ink, drawing: black and colored
 2893 Ink, duplicating
 2899 Ink, indelible
 2893 Ink, printing: base or finished
 2899 Ink, stamp pad
 3229 Inkwells, glass
 2499 Inlays for furniture (veneers)
 3131 Inner soles, leather
 3011 Inner tubes: airplane, automobile, bicycle, motorcycle, and tractor
 2819 Inorganic acids, except nitric or phosphoric
 2833 Inorganic medicinal chemicals: bulk, uncompounded
 2816 Inorganic pigments
 2879 Insect powder, household
 3496 Insect screening, woven wire: made from purchased wire
 2879 Insecticides, agricultural
 2879 Insecticides, household
 3999 Insignia, military: except textile
 2399 Insignia, military: textile
 2899 Inspection oil, fluorescent
 2095 Instant coffee
 3646 Institutional lighting fixtures
 3714 Instrument board assemblies, motor vehicle
 3662 Instrument landing systems (ILS), airborne and ground
 3832 Instrument lenses
 3728 Instrument panel mock-ups: aircraft training units
 3825 Instrument relays, all types

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- | | |
|--|---|
| 3825 Instrument shunts | 3811 Integrators (mathematical instruments) |
| 3495 Instrument springs, precision: made from purchased wire | 3432 Interceptors, plumbers' |
| 3612 Instrument transformers, except portable | 3662 Intercommunication systems, electric |
| 3829 Instrumentation for reactor controls, auxiliary | 3443 Intercooler shells |
| 3841 Instruments and apparatus: medical, surgical, ophthalmic, and veterinary | 3832 Interferometers |
| 3823 Instruments for industrial process controls | 2211 Interlining material, cotton |
| 3825 Instruments for measuring electrical quantities | 2396 Interlinings, pockets, belt loops, etc.: men's and boys' |
| 3825 Instruments, electric: for testing electrical characteristics | 2396 Interlinings: for men's, youths', and boys' suits and coats |
| 3952 Instruments, lettering: artists' | 2865 Intermediates, cyclic (coal tar) |
| 3931 Instruments, musical | 3825 Internal combustion engine analyzers, to test electrical characteristics |
| 3861 Instruments, photographic | 3519 Internal combustion engines except aircraft and non-diesel automotive |
| 3357 Insulated wire and cable, nonferrous | 3555 Intertype machines |
| 2649 Insulating batts, fills, and blankets: paper— <i>mfp</i> m | 3743 Interurban cars and car equipment |
| 2899 Insulating compounds | 3842 Intra-uterine devices |
| 2291 Insulating felts, except woven | 2834 Intravenous solutions |
| 3255 Insulating firebrick and shapes, clay | 2782 Inventory blankbooks |
| 3231 Insulating glass, made from purchased glass | 2062 Invert sugar |
| 3211 Insulating glass, sealed units: <i>mitse</i> | 3629 Inverters, nonrotating: electrical |
| 3292 Insulating materials for covering boilers and pipes | 3621 Inverters, rotating: electrical |
| 2499 Insulating materials, cork | 3324 Investment castings, steel |
| 3275 Insulating plaster, gypsum | 3843 Investment material, dental |
| 2952 Insulating siding, impregnated: made from purchased materials | 2753 Invitations, engraved |
| 2661 Insulating siding, paper or board, <i>mitse</i> | 2819 Iodides |
| 2241 Insulating tapes and braids, electric | 2819 Iodine, elemental |
| 3079 Insulation and cushioning material, foamed plastics | 2819 Iodine, resublimed |
| 2661 Insulation board, cellular fiber or hard pressed (without gypsum): <i>mitse</i> | 2834 Iodine, tincture of |
| 3296 Insulation, mineral wool; made of rock, slag, and silica minerals | 3829 Ion chambers |
| 3292 Insulation, molded asbestos | 2821 Ion exchange resins |
| 2298 Insulator pads, cordage | 2821 Ionomer resins |
| 3644 Insulators and insulation materials, electrical: except glass, porcelain | 2869 Ionone |
| 3229 Insulators, electrical: glass | 3339 Iridium refining, primary |
| 3264 Insulators, electrical: porcelain | 3341 Iridium smelting and refining, secondary |
| 2834 Insulin preparations | 2816 Iron blue pigment |
| 2833 Insulin: bulk, uncompounded | 3321 Iron castings, ductile and nodular |
| 3299 Insulsleeves (foundry materials) | 2891 Iron cement, household |
| 2851 Intaglio ink vehicle | 2816 Iron colors |
| 3825 Integrated-circuit testers | 3842 Iron lungs |
| 3825 Integrating electricity meters | 3399 Iron ore, recovery from open hearth slag |
| 3824 Integrating meters, nonelectric | 2816 Iron oxide, black |
| | 2816 Iron oxide, magnetic |
| | 2816 Iron oxide, yellow |
| | 3312 Iron sinter, made in steel mills |
| | 2819 Iron sulphate |
| | 3312 Iron, pig |
| | 3399 Iron, powdered |
| | 3469 Ironer parts, porcelain enameled |
| | 3633 Ironers and mangles, household |
| | 3582 Ironers, commercial laundry and dry cleaning |

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STANDARD INDUSTRIAL CLASSIFICATION

2291 Ironing board felts, except woven
 2392 Ironing board pads, *m/fpm*
 3499 Ironing boards, metal
 2499 Ironing boards, wood
 3634 Irons, domestic: electric
 3953 Irons, marking or branding
 3423 Ironworkers' hand tools
 3523 Irrigation equipment, self-propelled
 3272 Irrigation pipe, concrete
 3444 Irrigation pipe, sheet metal
 2821 Isobutylene polymers
 2822 Isobutylene-isoprene rubbers
 2822 Isocyanate type rubber
 2865 Isocyanates
 2822 Isoprene rubbers, synthetic
 2869 Isopropyl alcohol
 2819 Isotopes, radioactive
 2032 Italian foods, canned
 3841 IV transfusion apparatus

J

3569 Jack screws
 3482 Jackets, bullet: 30 mm. (or 1.18 inch) and below
 2337 Jackets, except fur: women's, misses', and juniors'
 2371 Jackets, fur: women's, misses', and juniors'
 3443 Jackets, industrial: metal plate
 2386 Jackets, leather and sheep-lined
 2339 Jackets, not tailored: women's, misses', and juniors'
 2328 Jackets, overall and work
 2329 Jackets, sport: suede, leatherette, melton, blanket lined—men's and boys'
 3199 Jackets, welder's: leather
 2363 Jackets: girls', children's, and infants'—*m/fpm*
 3569 Jacks, hydraulic: for general industrial use
 2499 Jacks, ladder: wood
 3531 Jacks, mud
 3423 Jacks: lifting, screw, and ratchet (hand tools)
 3552 Jacquard card cutting machines
 2645 Jacquard cards, *m/fpm*
 3552 Jacquard loom parts and attachments
 2211 Jacquard woven fabrics, cotton
 2221 Jacquard woven fabrics, man-made fiber and silk
 3442 Jalousies, all metal or metal frame
 2431 Jalousies, glass—wood frame

2033 Jams
 3589 Janitors' carts
 3111 Japanning of leather
 3479 Japanning of metal
 3567 Japanning ovens
 2851 Japans, baking and drying
 3486 Jar crowns and tops, stamped metal
 3069 Jar rings, rubber
 3221 Jars (packers' ware), glass
 3069 Jars, battery: hard rubber
 2211 Jean fabrics
 2033 Jellies, edible
 2099 Jelly, corncob (gelatin)
 2257 Jersey cloth, *misc*
 2253 Jerseys and sweaters, *misc*
 3724 Jet assisted take-off devices (JATO)
 2899 Jet fuel igniters
 2911 Jet fuels
 3724 Jet propulsion and internal combustion engines and parts, aircraft
 3519 Jet propulsion engines, except aircraft
 3483 Jet propulsion projectiles, complete
 3915 Jewel bearings, synthetic
 3915 Jewel cutting, drilling, polishing, recutting, or setting
 3915 Jewel preparing: for instruments, tools, watches, and jewelry
 3911 Jewel settings and mountings, precious metal
 2645 Jewelers' cards, *m/fpm*
 3915 Jewelers' findings and materials
 3423 Jewelers' hand tools
 3559 Jewelers' machines
 3915 Jewelry castings (findings)
 3479 Jewelry enameling, for the trade
 3915 Jewelry parts, unassembled
 3911 Jewelry polishing for the trade
 3911 Jewelry soldering, for the trade
 3961 Jewelry, costume: except precious metal and precious or semiprecious stone
 3911 Jewelry, made of precious metal or precious or semiprecious stones
 3541 Jig boring machines
 3541 Jig grinding machines
 3544 Jigs and fixtures (metalworking machinery accessories)
 3544 Jigs: inspection, gauging, and checking
 2711 Job printing and newspaper publishing combined
 2754 Job printing: gravure
 2751 Job printing: letterpress and screen printing
 3544 Joiners (woodworking machines)

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- 3568 Joints, swivel: except automobile and aircraft
 3568 Joints, universal: except motor vehicle
 3272 Joists, concrete
 3441 Joists, open web steel: long-span series
 3221 Jugs (packers' ware), glass
 3429 Jugs, vacuum
 3634 Juice extractors, electric
 3551 Juice extractors, fruit and vegetable: commercial type
 2033 Juices, fruit and vegetable: canned, bottled, and bulk
 3651 Juke boxes
 2631 Jute liner board, *mitse*
 2514 Juvenile furniture, metal
 2519 Juvenile furniture, rattan and reed: padded or plain
 2512 Juvenile furniture, upholstered on wood frames
 2511 Juvenile furniture, wood: except upholstered
- K**
- 2851 Kalsomines, dry or paste
 3295 Kaolin, ground or otherwise treated
 3732 Kayaks, building and repairing
 3275 Keene's cement
 3412 Kegs, shipping: steel and other metal
 2449 Kegs, wood: coopered
 2048 Kelp meal and pellets
 2833 Kelp plants
 3825 Kelvin bridges (electrical measuring instruments)
 2911 Kerosene
 3433 Kerosene space heaters
 2033 Ketchup
 2869 Ketone, methyl ethyl
 2869 Ketone, methyl isobutyl
 3443 Kettles (process vessels), metal plate
 3429 Key blanks
 3172 Key cases, regardless of material
 3496 Key rings, made from purchased wire
 3573 Key to tape or disk devices
 3931 Keyboards, piano or organ
 3573 Key punches: key to tape and key to disk devices
 3429 Keys
 3496 Keys, can: made from purchased wire
 3931 Keys, piano or organ
 3541 Keyseating machines (machine tools)
 2261 Kler bleaching, continuous machine
 2421 Kiln drying of lumber
 3255 Kiln furniture, clay
 3559 Kilns: cement, wood, and chemical
 3567 Kilns: except cement, chemical, and wood kilns
 3829 Kinematic test and measuring equipment
 3269 Kitchen articles, coarse earthenware
 3262 Kitchen articles, commercial and household: vitreous china
 3263 Kitchen articles, semivitreous earthenware
 2514 Kitchen cabinets, metal
 2434 Kitchen cabinets, wood: factory-made
 3421 Kitchen cutlery
 3361 Kitchen utensils, cast aluminum
 3469 Kitchen utensils, porcelain enameled
 3469 Kitchen utensils, stamped and pressed metal: except cast aluminum
 3496 Kitchen wire goods, made from purchased wire
 2499 Kitchen woodenware
 3079 Kitchenware, plastics
 3944 Kites
 3999 Kits, hosiery: sewing and mending
 3079 Kits, plastics
 2449 Kits, wood: coopered
 3673 Klystron tubes
 2393 Knapsacks, canvas
 3842 Kneecap supporters, orthopedic
 3069 Kneeling pads, rubber
 2327 Knickers, dress (separate): men's, youths', and boys'
 2339 Knickers: women's, misses', and juniors'
 3421 Knife blades
 3421 Knife blanks
 3613 Knife switches, electric
 2051 Knishes
 2381 Knit gloves, *m/psm*
 2284 Knitting hand thread: cotton, silk, and man-made fiber
 3552 Knitting machines
 2281 Knitting yarn: cotton, silk, and man-made staple
 2283 Knitting yarn: wool, mohair, or similar animal fiber
 3423 Knives, agricultural and industrial
 3634 Knives, electric
 3423 Knives, machine: except metal cutting
 3545 Knives, shear
 3841 Knives, surgical
 3421 Knives: butchers', hunting, pocket, and table—except all metal and electric
 3914 Knives: silver, silver plated, and stainless steel

STANDARD INDUSTRIAL CLASSIFICATION:

2851	Lacquer bases and dopes
2262	Lacquer printing of man-made fiber and silk broad woven fabrics
2851	Lacquer thinner
2851	Lacquer, clear and pigmented
3479	Lacquering of metal products, for the trade
3567	Lacquering ovens
2851	Lacquers, plastic
3949	Lacrosse equipment
2023	Lactose, edible
3499	Ladder assemblies, combination work- stand: metal

L

3531 Ladder ditchers: vertical boom or wheel
3429 Ladder jacks, metal
2499 Ladder jacks, wood
2426 Ladder rounds or rungs, hardwood
3446 Ladders, chain
3446 Ladders, for permanent installation:
metal
3499 Ladders, metal: portable
2499 Ladders, wood
3443 Ladle bails
3255 Ladle brick, clay
3443 Ladles, metal plate
2865 Lake Red O toners
2865 Lakes, color
2013 Lamb stew
2011 Lamb, *mitse*
2649 Laminated building paper, *m/psm*
2645 Laminated cardboard, *m/psm*
3211 Laminated glass, made from glass pro-
duced in the same establishment
3231 Laminated glass, made from purchased
glass
3079 Laminated plastics sheets, rods, and
tubes
2891 Laminating compounds
2295 Laminating of fabrics
3079 Laminating of plastics, for the trade
3399 Laminating steel for the trade
3699 Lamp (bulb) parts, electric
3281 Lamp bases, onyx
3079 Lamp bases, plastics
3269 Lamp bases, pottery
2816 Lamp black
3648 Lamp fixtures, infra-red
3496 Lamp frames, wire: made from pur-
chased wire
3559 Lamp making machinery, incandescent
3229 Lamp parts, glass
3446 Lamp posts
3999 Lamp shade frames

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3999 Lamp shades, except glass and metal
 3229 Lamp shades, glass
 3645 Lamp shades, metal
 3643 Lamp sockets and receptacles (electric wiring devices)
 3645 Lamps (lighting fixtures), residential: electric
 3641 Lamps, electric: incandescent filament, fluorescent, and vapor
 3641 Lamps, glow
 3641 Lamps, health: infra-red and ultra-violet radiation
 3699 Lamps, insect: electric
 3647 Lamps, marker and clearance: motor vehicle
 3641 Lamps, sealed beam
 3641 Lamps, slit (ophthalmic goods)
 3693 Lamps, X-ray
 3523 Land rollers and levelers (agricultural machinery)
 3728 Landing gear, aircraft
 3449 Landing mats, aircraft: metal
 3731 Landing ships, building and repairing
 3728 Landing skis and tracks, aircraft
 3229 Lantern globes, glass: pressed or blown
 3861 Lantern slide plates, sensitized
 2646 Lanterns, halloween; papier mache—*mjpm*
 3648 Lanterns: electric, gas, carbide, kerosene, and gasoline
 3915 Lapidary work, contract and other
 3541 Lapping machines
 2013 Lard, *mjpm*
 2011 Lard, *mitse*
 3811 Laser beam alignment devices
 3811 Laser scientific and engineering instruments
 3862 Laser systems and equipment, except scientific and engineering instruments
 3199 Lashes (whips)
 2411 Last blocks, wood: hewn or riven
 2499 Last sole patterns, regardless of material
 2499 Lasts, boot and shoe: regardless of material
 3069 Latex, foamed
 3449 Lath, expanded metal
 2661 Lath, fiber: *mitse*
 2421 Lath, made in sawmills and lathmills
 3496 Lath, woven wire: made from purchased wire
 3545 Lathe attachments and cutting tools (machine tool accessories)
 3541 Lathes, metal cutting
 3541 Lathes, metal polishing
 3542 Lathes, spinning
 3553 Lathes, wood turning: including accessories
 3111 Latigo leather
 2399 Launderers' nets
 2392 Laundry bags, *mjpm*
 3537 Laundry containers on wheels, fiberglass
 2211 Laundry fabrics, cotton
 3444 Laundry hampers, sheet metal
 2499 Laundry hampers: rattan, reed, splint, veneer, and willow
 3582 Laundry machinery and equipment, commercial
 3633 Laundry machinery, household and coin-operated
 2211 Laundry nets, *mitse*
 2899 Laundry sours
 3272 Laundry trays, concrete
 3261 Laundry trays, vitreous china
 3431 Laundry tubs, enameled iron and other metal
 3079 Laundry tubs, plastics: glass fiber base
 2869 Lauric acid esters
 3431 Lavatories, enameled iron and other metal
 3261 Lavatories, vitreous china
 3524 Lawn edgers
 2514 Lawn furniture, metal
 2511 Lawn furniture, wood
 2519 Lawn furniture: except wood, metal, stone, and concrete
 3524 Lawn mowers, hand and power
 3524 Lawn rollers
 3432 Lawn sprinklers
 2211 Lawns, cotton
 2834 Laxatives
 3691 Lead acid batteries (storage batteries)
 3356 Lead and lead alloy bars, pipe, plates, rods, sheets, strip, and tubing
 2879 Lead arsenate, formulated
 2892 Lead azide (explosive)
 3497 Lead foil, not made in rolling mills
 2816 Lead oxide pigments
 2819 Lead oxides, other than pigments
 3952 Lead pencils: cased in wood, paper, or other material
 2816 Lead pigments
 3332 Lead pigs, blocks, ingots, and refinery shapes: primary
 3356 Lead rolling, drawing, and extruding
 2819 Lead silicate
 3332 Lead smelting and refining, primary

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STANDARD INDUSTRIAL CLASSIFICATION

- 3341 Lead smelting and refining, secondary
 3369 Lead wheel balancing weights
 3699 Lead-in wires, electric lamp: made from purchased wire
 2851 Lead-in-oil paints
 3295 Lead, black (natural graphite): ground, refined, or blended
 3952 Lead, pencil: black, indelible, or colored
 3231 Leaded glass, made from purchased glass
 3949 Leaders, fishing
 3555 Leads, printers'
 3423 Leaf skimmers and swimming pool rakes
 3493 Leaf springs: automobile, locomotive, and other vehicle
 3497 Leaf: gold, silver, and other metals
 3599 Leak detectors, water
 3199 Leashes, dog
 3199 Leather belting for machinery: flat, solid, twisted, and built-up
 3111 Leather coloring, cutting, embossing, janning, and wetting
 3111 Leather converters
 2842 Leather dressings and finishes
 2865 Leather dyes and stains, synthetic
 2843 Leather finishing agents
 2386 Leather garments
 3199 Leather goods, embossed
 3172 Leather goods, small: personal
 2843 Leather processing assistants
 **** Leather products, artificial—code as genuine leather products
 3131 Leather wetting
 3559 Leather working machinery
 2295 Leather, artificial
 3111 Leather: tanning, currying, and finishing
 2631 Leatherboard, *mitse*
 2099 Leavening compounds, prepared
 2075 Lecithin
 2782 Ledgers and ledger sheets
 3199 Leggings, canvas and leather
 3199 Leggings, welders': leather
 2369 Leggings: girls', children's, and infants'—*mfp*
 3931 Legs, piano and organ
 2899 Lemon oil
 2211 Leno fabrics, cotton
 2221 Leno fabrics, man-made fiber and silk
 3229 Lens blanks, optical and ophthalmic
 3832 Lens coating
 3832 Lens grinding, except ophthalmic
 3851 Lens grinding, ophthalmic
 3832 Lens mounts
 3861 Lens shades, camera
 3229 Lenses, glass: for lanterns, flashlights, headlights, and searchlights
 3851 Lenses, ophthalmic
 3832 Lenses, optical: photographic, magnifying, projection, and instrument
 3079 Lenses, plastics: except ophthalmic or optical
 2339 Leotards, *mfp*
 2253 Leotards, *mitse*
 3579 Letter folding, stuffing, and sealing machines
 3545 Letter pins (gauging and measuring)
 3952 Lettering instruments, artists'
 2751 Letterpress printing, screen and flexographic
 3953 Letters (marking devices), metal
 3993 Letters for signs, metal
 2645 Letters, cardboard: *mfp*
 2754 Letters, circular and form: gravure printing
 2751 Letters, circular and form: letterpress and screen printing
 2752 Letters, circular and form: lithographed
 2499 Letters, wood
 3823 Level and bulk measuring instruments, industrial process type
 3829 Level gauges, radiation type
 3229 Level vials for instruments, glass
 3547 Levelers, roller (rolling mill equipment)
 3423 Levels, carpenters'
 3811 Levels, surveyors'
 2292 Levers laces
 2782 Library binders, looseleaf
 2645 Library cards, *mfp*
 2531 Library furniture
 3469 License tags, automobile: stamped metal
 2065 Licorice candy
 3069 Life jackets: inflatable, rubberized fabric
 2499 Life preservers, cork
 3842 Life preservers, except cork and inflatable
 3069 Life preservers, inflatable: rubber
 3732 Life rafts, except inflatable (rubber and plastic)
 3079 Life rafts, nonrigid: plastics
 3069 Life rafts, rubber
 3732 Lifeboats, building and repairing
 3537 Lift trucks, industrial: fork, platform, straddle, etc.
 3534 Lifts (elevators), passenger and freight
 3131 Lifts, heel: leather
 3842 Ligatures, medical
 3662 Light and heat emission operating apparatus

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- 3641 Light bulbs, electric: complete
 3674 Light emitting diodes
 3861 Light meters, photographic
 3673 Light sensing and emitting tubes
 3674 Light sensitive devices, solid state
 3229 Light shades, glass: pressed or blown
 3645 Light shades, metal
 3832 Light sources, standard
 2899 Lighter fluid
 3634 Lighters, cigar and cigarette: electric
 3999 Lighters, cigar and cigarette: except precious metal and electric
 3911 Lighters, cigar and cigarette: made of precious metal
 3731 Lighters, marine: building and repairing
 3731 Lighthouse tenders, building and repairing
 3624 Lighting carbons
 3645 Lighting fixtures, residential: electric
 3229 Lighting glassware, pressed or blown
 3612 Lighting transformers, fluorescent
 3612 Lighting transformers, street and airport
 3643 Lightning arrestors and coils
 3643 Lightning protection equipment
 3645 Lights, yard: electric
 2821 Lignin plastics
 3489 Limbers, gun and caisson
 3842 Limbs, artificial
 3274 Lime
 2819 Lime bleaching compounds
 2869 Lime citrate
 3274 Lime plaster
 2879 Lime-sulfur, dry and solution
 3281 Limestone, cut and shaped
 3822 Limit controls, residential and commercial heating types
 2879 Lindane, formulated
 3531 Line markers, self-propelled
 3822 Line or limit control for electric heat
 3494 Line strainers, for use in piping systems
 3494 Line valves: steam, water, oil, and machinery—except plumbers' brass goods
 3612 Line voltage regulators
 3662 Linear accelerators
 3824 Linear counters
 2824 Linear esters fibers
 2793 Linecuts (photoengraving plates)
 3151 Lined leather gloves or mittens
 3842 Linemen's safety belts
 2299 Linen fabrics
 2269 Linen fabrics: dyeing, finishing, and printing
 2631 Liner board, kraft and jute: *mitse*
 3259 Liner brick and plates, for lining sewers, tanks, etc.: vitrified clay
 3069 Liner strips, rubber
 2645 Liners for freight car doors: reinforced with metal strip—*m/pm*
 3443 Liners, industrial: metal plate
 2834 Liniments
 2241 Lining fabric, glove
 2221 Lining fabrics, man-made fiber and silk
 2291 Lining felts, except woven
 3111 Lining leather
 2621 Lining paper, *mitse*
 3259 Lining, stove and flue: clay
 3131 Linings, boot and shoe: leather
 2291 Linings, carpet: felt—except woven
 2392 Linings, carpet: textile—except felt
 3995 Linings, casket
 2396 Linings, handbag or pocketbook
 2396 Linings, hat: men's
 2396 Linings, luggage
 2221 Linings, rayon or silk: *mitse*
 3499 Linings, safe and vault: iron and steel
 2259 Linings, shoe: made in knitting mills
 2396 Linings: suit, coat, shirt, skirt, dress, necktie, millinery, etc.
 3728 Link trainers (aircraft training mechanisms)
 3489 Links, for ammunition over 80 mm. (or over 1.18 inch)
 3484 Links, for ammunition 80 mm. (or 1.18 inch) and below
 2851 Linoleates (paint driers)
 3996 Linoleum
 2891 Linoleum cement
 2791 Linotype composition, for the printing trade
 3555 Linotype machines
 2076 Linseed oil, cake, and meal
 3272 Lintels, concrete
 3446 Lintels, light gauge steel
 2844 Lipsticks
 2911 Liquefied petroleum gases
 3823 Liquid analysis instruments, industrial process type
 3569 Liquid automation machinery and equipment
 3823 Liquid concentration instruments, industrial process type
 3822 Liquid level controls, residential and commercial heating types
 3823 Liquid level instruments, industrial process type
 3443 Liquid oxygen tanks, metal plate

- 3829 Liquid scintillation spectrometers
 2063 Liquid sugar or sirup, beet sugar refining
 2066 Liquor, chocolate
 2062 Liquors, malt
 2085 Liquors: distilled, rectified, and blended—
 except brandy
 3579 List finders, automatic
 3523 Listers
 2816 Litharge
 2819 Lithium compounds
 2819 Lithium metal
 2621 Lithograph paper, *mitse*
 2893 Lithographic ink
 2795 Lithographic plates or positives or nega-
 tives, preparation of
 2752 Lithographic printing
 3555 Lithographic stones
 2851 Lithographic varnishes
 2752 Lithographing on metal or paper
 2865 Lithol rubine lakes and toners
 2816 Lithopone
 2641 Litmus paper
 3489 Livens projectors (ordnance)
 2048 Livestock feeds
 2512 Living room furniture, upholstered on
 wood frames
 3524 Loaders (garden tractor equipment)
 3523 Loaders, farm type (general utility)
 3531 Loaders, shovel: self-propelled
 3483 Loading and assembling bombs, powder
 bags, and shells: over 30 mm.
 3532 Loading machines, underground: mobile
 3545 Loading, unloading, and transfer devices
 3679 Loads, electronic
 3732 Lobster boats, building and repairing
 3452 Lock washers
 2542 Lockers, except refrigerated: metal
 2541 Lockers, except refrigerated: wood
 3585 Lockers, refrigerated
 3429 Locks and lock sets, except safe and
 vault: not coin-operated
 3531 Locks, coin-operated
 3499 Locks, safe and vault
 3647 Locomotive and railroad car lights
 3531 Locomotive cranes
 3493 Locomotive springs
 3462 Locomotive wheels, forged: not made in
 rolling mills
 3312 Locomotive wheels, rolled
 3743 Locomotives, locomotive frames, and
 parts
 2411 Logging camps and logging contractors,
 not operating sawmills
 2421 Logging camps combined with sawmills
 3531 Logging equipment
 3825 Logic circuit testers
 2411 Logs
 3699 Logs, fireplace: electric
 3433 Logs, fireplace: gas
 2861 Logwood extract
 2211 Long cloth, cotton
 3552 Loom bobbins, wood or metal
 3552 Loom reeds, textile
 3552 Looms (textile machinery)
 3552 Loopers (textile machinery)
 2395 Looping, for the trade
 2782 Looseleaf devices and binders
 2648 Looseleaf fillers and ream paper in filler
 sizes, except printed: *m/psm*
 2782 Looseleaf forms and fillers, pen ruled or
 printed only
 3662 Loran equipment
 3851 Lorgnettes
 2844 Lotions, cosmetic
 2844 Lotions, shaving
 3651 Loudspeakers, electrodynamic and mag-
 netic
 2384 Lounging garments, except knit: men's
 and women's
 2369 Lounging robes, except knit: children's—
 m/psm
 2253 Lounging robes, *mitse*
 3442 Louver doors, all metal or metal frames
 2431 Louver doors: wood
 2431 Louver windows and doors, glass with
 wood frame
 3442 Louver windows, all metal or metal
 frame
 3914 Loving cups: silver, nickel silver, pew-
 ter, and plated
 2065 Lozenges, candy: nonmedicated
 2834 Lozenges, pharmaceutical
 2992 Lubricating greases and oils, not made
 in petroleum refineries
 2911 Lubricating greases and oils, produced
 in petroleum refineries
 2992 Lubricating oils, re-refining
 3724 Lubricating systems, aircraft
 3569 Lubricating systems, centralized
 3569 Lubrication equipment, industrial
 3569 Lubrication machinery, automatic
 3714 Lubrication systems and parts, motor
 vehicle
 3743 Lubrication systems, locomotive
 3199 Luggage corners and handles, leather
 2211 Luggage fabrics, cotton

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3999 Luggage frames
 3429 Luggage hardware
 2396 Luggage linings
 3429 Luggage racks, car top
 3161 Luggage, regardless of material
 3559 Lumber drying kilns
 2421 Lumber stacking or sticking
 2426 Lumber, hardwood dimension
 2421 Lumber, kiln drying of
 2491 Lumber, structural: treated
 2421 Lumber: rough, sawed, or planed
 2329 Lumberjackets: men's, youths', and boys'
 2819 Luminous compounds, radium
 3646 Luminous panel ceilings
 3612 Luminous tube transformers
 3469 Lunch boxes, stamped metal
 2392 Lunch cloths, *mfp*
 2013 Luncheon meat, canned
 2099 Lunches, box: for sale off premises
 2542 Lunchroom fixtures, metal
 2541 Lunchroom fixtures, wood
 3842 Lungs, iron
 3832 Lupes magnifying instruments, optical
 3949 Lures, fishing: artificial
 2842 Lye, household

M

2098 Macaroni and products, dry: including alphabets, rings, seashells, etc.
 3551 Macaroni machinery: for making macaroni, spaghetti, noodles, etc.
 2032 Macaroni, canned
 3423 Machetes
 3499 Machine bases, metal
 3444 Machine guards, sheet metal
 3484 Machine gun ammunition carts
 3484 Machine gun belts, metallic: 30 mm. (or 1.18 inch) and below
 3484 Machine gun carts
 3484 Machine guns and parts, 30 mm. (or 1.18 inch) and below
 3452 Machine keys
 3423 Machine knives, except metal cutting
 3545 Machine knives, metalworking
 3469 Machine parts, stamped and pressed metal
 3599 Machine shops, jobbing and repair
 3545 Machine tool attachments and accessories
 3541 Machine tool replacement and repair parts, metal cutting types
 3612 Machine tool transformers
 3541 Machine tools, metal cutting types: including rebuilding
 3541 Machine tools, metal cutting, exotic (chemical, explosive, etc.)
 3542 Machine tools, metal forming types: including rebuilding
 3542 Machine tools, metal forming: exotic (chemical, explosion, etc.)
 3361 Machinery castings, aluminum
 3369 Machinery castings, nonferrous except aluminum, copper, and copper alloys
 3362 Machinery castings: brass, copper, and copper base alloy
 3811 Machmeters
 2091 Mackerel: smoked, salted, dried, and pickled
 2329 Mackinaws: men's, youths', and boys'
 2211 Madras, cotton
 2511 Magazine racks, wood
 2789 Magazines, binding only
 3484 Magazines, gun: 30 mm. (or 1.18 inch) and below
 2754 Magazines: gravure printing (not publishing)
 2751 Magazines: letterpress and screen printing (not publishing)
 2721 Magazines: publishing and printing, or publishing only
 3944 Magic lanterns (toys)
 3295 Magnesite, crude: ground, calcined, or dead-burned
 3356 Magnesium and magnesium alloy bars, rods, shapes, sheets, strip and tubing
 3497 Magnesium and magnesium base alloy foil, not made in rolling mills
 2819 Magnesium carbonate
 3369 Magnesium castings and die castings
 2819 Magnesium chloride
 2819 Magnesium compounds, inorganic
 3339 Magnesium refining, primary
 3356 Magnesium rolling, drawing, and extruding
 3341 Magnesium smelting and refining, secondary
 3357 Magnet wire, insulated
 3662 Magnetic amplifiers, except home type
 3674 Magnetic bubble memory device
 3824 Magnetic counters
 3573 Magnetic disk drives
 3662 Magnetic field detection apparatus
 3823 Magnetic flow meters, industrial process type
 3542 Magnetic forming machines

- 3811 Magnetic idealization generators
 3573 Magnetic ink readers, sorters, and inscribers
 2899 Magnetic inspection oil and powder
 2816 Magnetic iron oxide
 3679 Magnetic recording tape
 3578 Magnetic tape transports or drives
 3652 Magnetic tape, pre-recorded
 3674 Magnetohydrodynamic (MHD) devices
 3694 Magnetos, automotive: electric
 3673 Magnetrons
 3264 Magnets: permanent, ceramic or ferrite—except for electronic applications
 3499 Magnets, permanent: metallic
 3651 Magnifiers (readers and simple magnifiers)
 3832 Magnifying instruments, optical
 3832 Magnifying lenses
 2339 Maids' washable service apparel
 3469 Mail boxes, except collection boxes
 2542 Mail carrier cases and tables: metal
 3444 Mail chutes, sheet metal
 3444 Mail collection or storage boxes, sheet metal
 2542 Mail pouch racks, metal
 3579 Mail tying (bundling) machines
 2655 Mailing cases and tubes, paper fiber (metal end or all fiber): *mjpm*
 3579 Mailing machines
 2542 Mailing racks, postal service: metal
 2519 Malacca furniture, padded or plain
 2865 Maleic anhydride
 3322 Malleable iron castings
 3322 Malleable iron foundries
 3949 Mallets, polo, croquet, etc.
 3555 Mallets, printers'
 3069 Mallets, rubber
 2499 Mallets, wood
 2869 Malononitrile, technical grade
 2083 Malt byproducts
 2082 Malt extract, liquors, and sirups
 3551 Malt mills
 2099 Malt, bakers'
 2083 Malt: barley, rye, wheat, and corn
 2023 Malted milk
 2083 Malthouses
 2823 Man-made cellulosic fibers
 2262 Man-made fiber broad woven fabric finishing
 2221 Man-made fiber broad woven fabrics
 2282 Man-made fiber filament yarn: throwing, twisting, winding, or spooling
 2241 Man-made fiber narrow woven fabrics
 2284 Man-made fiber thread
 2324 Man-made fibers, except cellulosic
 2281 Man-made staple fiber yarn, spun
 3931 Mandolins and parts
 3545 Mandrels
 2819 Manganese dioxide powder, synthetic
 3313 Manganese metal, not produced in blast furnaces
 2361 Mangrove extract
 3272 Manhole covers and frames, concrete
 3321 Manhole covers, metal
 2844 Manicure preparations
 2761 Manifold business forms
 3714 Manifolds, motor vehicle
 3498 Manifolds, pipe: fabricated from purchased pipe
 2645 Manila folders, *mjpm*
 2631 Manila lined board, *mtse*
 2631 Manila wrapping paper, *mtse*
 3999 Mannikins and display forms
 3823 Manometers, industrial process type
 3272 Mantels, concrete
 2431 Mantels, wood
 3423 Manure forks
 3523 Manure loaders
 3523 Manure spreaders
 2789 Map mounting
 3811 Map plotting instruments
 2099 Maple sirup
 2753 Maps, engraved
 2752 Maps, lithographing only
 2754 Maps: gravure printing (not publishing)
 2751 Maps: letterpress and screen printing (not publishing)
 2741 Maps: publishing and printing, or publishing only
 2033 Maraschino cherries
 3381 Marble, building: cut and shaped
 2499 Marbleboard (stone-face hard board)
 3944 Marbles (toys)
 2899 Margaric acid
 2879 Margarine
 3931 Marimbas
 2452 Marinas, prefabricated: wood
 3622 Marine and navy auxiliary controls
 2077 Marine animal oils
 3443 Marine boilers
 3519 Marine engines: diesel, semi-diesel, and other internal combustion
 2899 Marine fuses
 3429 Marine hardware
 3499 Marine horns, compressed air or steam
 3662 Marine horns, electric

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2851 Marine paints
 3731 Marine rigging
 3900 Marionettes (puppets)
 3647 Marker lamps, motor vehicle
 3951 Markers, soft tip (felt, fabric, plastic, etc.)
 2499 Market baskets, except fruit and vegetable: veneer and splint
 2449 Market baskets, fruit and vegetable: veneer and splint
 3953 Marking devices, hand: stamps, seals, branding irons, etc.
 3549 Marking machines, metalworking
 2033 Marmalade
 2499 Marquetry, wood
 2211 Marquisettes, cotton
 2221 Marquisettes, man-made fiber
 2099 Marshmallow creme
 2065 Marshmallows
 2065 Marzipan
 3662 Maser equipment, all types
 3496 Mashers, potato: made from purchased wire
 2499 Mashers, potato: wood
 2641 Masking tape, *mjpm*
 3842 Masks, gas
 2646 Masks, papier mache: *mjpm*
 3949 Masks: baseball, fencing, hockey, etc.
 3546 Masonry and concrete drilling tools, power: portable
 3241 Masonry cement
 3423 Masons' hand tools
 3274 Masons' lime
 2389 Masquerade costumes
 3999 Massage machines, electric: designed for beauty and barber shops
 3634 Massage machines, electric: except designed for beauty and barber shop
 3652 Master records or tapes, preparation of
 2951 Mastic floor composition, hot and cold
 2952 Mastic roofing composition
 2499 Masts, wood
 3999 Matches and match books
 2211 Matelasse, cotton
 3811 Mathematical integrators
 2631 Matrix board, *mitse*
 2621 Matrix paper, *mitse*
 3496 Mats and matting, made from purchased wire
 2271 Mats and matting, woven cotton and wool
 3069 Mats and matting: bath, door, etc.—rubber
 2279 Mats and matting: twisted paper, grass, reed, coir, sisal, jute, and rag
 3555 Mats, advertising and newspaper (matrices)
 2211 Mats, bath: *mitse*
 2291 Mats, felt: except woven
 2645 Mats, photograph: *mjpm*
 2295 Mats, varnished glass
 3423 Mattocks (hand tools)
 2392 Mattress pads
 2392 Mattress protectors, except rubber
 3069 Mattress protectors, rubber
 3272 Mattresses for river revetment, concrete articulated
 3292 Mattresses, asbestos
 2515 Mattresses, containing felt, foam rubber, urethane, etc.
 3069 Mattresses, pneumatic: fabric coated with rubber
 2515 Mattresses: innerspring, box spring, and noninnerspring
 2052 Matzoths
 3423 Mauls, metal (hand tools)
 2499 Mauls, wood
 3952 Maulsticks, artists'
 2035 Mayonnaise
 2048 Meal, alfalfa
 2048 Meal, bone: prepared as feed for animals and fowls
 2041 Meal, corn
 2046 Meal, corn oil
 2074 Meal, cottonseed
 2077 Meal, fish
 2046 Meal, gluten
 2076 Meal, linseed
 2076 Meal, peanut
 2044 Meal, rice
 2075 Meal, soybean
 2038 Meals, frozen
 2499 Measures, grain: wood-turned and shaped
 3999 Measures, tape
 3566 Measuring and dispensing pumps, gasoline and oil
 3825 Measuring equipment for electronic and electrical circuits and equipment
 3825 Measuring instruments and meters, electric
 3832 Measuring instruments, optical
 3545 Measuring tools and machines, machinists' metalworking type
 3824 Measuring wheels
 2259 Meat bagging, made in knitting mills

STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|---|------|--|
| 2499 | Meat boards, wood | 2891 | Mending cement |
| 2013 | Meat extracts, <i>m/psm</i> | 2399 | Mending gloves, on a factory basis |
| 2011 | Meat extracts, <i>mtse</i> | 2077 | Menhaden oil |
| 3551 | Meat grinders | 2752 | Menus, lithographed |
| 2499 | Meat hammers, wood | 2754 | Menus: gravure printing |
| 2077 | Meat meal and tankage | 2751 | Menus: letterpress and screen printing |
| 2011 | Meat packing plants | 2261 | Mercerizing cotton broad woven fabrics |
| 2032 | Meat pies, canned | 3552 | Mercerizing machinery |
| 2013 | Meat products: cooked, cured, frozen,
smoked, spiced, and boneless— <i>m/psm</i> | 2269 | Mercerizing yarn, braided goods, and narrow
fabrics: except knit and wool |
| 2035 | Meat sauces (seasoning): except catsup | 2643 | Merchandise bags, <i>m/psm</i> |
| 2099 | Meat seasonings, except sauces | 2542 | Merchandise display racks and stands,
metal |
| 2011 | Meat, <i>mtse</i> | 2541 | Merchandise display racks and stands,
wood |
| 3524 | Mechanical counters | 3561 | Merchandising machines, automatic |
| 3111 | Mechanical leather | 3629 | Mercury arc rectifiers (electrical apparatus) |
| 3495 | Mechanical springs, precision: made from
purchased wire | 2892 | Mercury azide (explosive) |
| 3542 | Mechanical-pneumatic or hydraulic metal
forming machines | 2819 | Mercury chlorides (calomel, corrosive
sublimite), except U.S.P. |
| 3423 | Mechanics' hand tools | 2833 | Mercury chlorides, U.S.P. |
| 2841 | Mechanics' paste | 2819 | Mercury compounds, inorganic |
| 3873 | Mechanisms for clockwork operated devices | 2833 | Mercury compounds, medicinal: organic
and inorganic |
| 3581 | Mechanisms for coin-operated machines | 2892 | Mercury fulminate (explosive) |
| 2499 | Medallion frames, wood or metal | 2819 | Mercury oxides |
| 3911 | Medals, of precious or semiprecious
metals | 2819 | Mercury, redistilled |
| 3829 | Medical diagnostic systems, nuclear | 3599 | Merry-go-rounds |
| 3069 | Medical sundries, rubber | 3496 | Mesh, made from purchased wire |
| 2328 | Medical uniforms, doctors' | 3661 | Message concentrators |
| 2085 | Medicinal alcohol, ethyl and grain | 2211 | Messaline, cotton |
| 2833 | Medicinal chemicals, organic and inorganic:
bulk, uncompounded | 3841 | Metabolism apparatus |
| 3221 | Medicine bottles, glass | 3569 | Metal baling presses |
| 2514 | Medicine cabinets, metal | 3396 | Metal burning for the trade |
| 3231 | Medicine droppers, made from purchased
glass | 3542 | Metal container making machines |
| 2834 | Medicines, capsuled or ampuled | 3542 | Metal deposit forming machines |
| 3825 | Megohm bridges (electrical measuring instruments) | 2899 | Metal drawing compound lubricants |
| 2821 | Melamine resins | 3429 | Metal fasteners, spring and cold rolled
steel, not made in rolling mills |
| 2024 | Mellorine | 3559 | Metal finishing equipment for plating,
etc. (except rolling mill lines) |
| 2024 | Mellorine-type products | 3567 | Metal melting furnaces, industrial: electric
and fuel fired |
| 3443 | Melting pots, for metal | 3674 | Metal oxide silicon (MOS) devices |
| 3255 | Melting pots, glass house: clay | 3479 | Metal painting (enameling, lacquering,
varnishing), for the trade |
| 2329 | Melton jackets: men's, youths', and boys' | 3559 | Metal pickling equipment, except rolling
mill lines |
| 2648 | Memorandum books, except printed:
<i>m/psm</i> | 2842 | Metal polish |
| 2782 | Memorandum books, printed | 3541 | Metal polishing lathes |
| 3674 | Memories, solid state | 3471 | Metal polishing, for the trade |
| 2252 | Men's, boys', and girls' hosiery | | |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3559 Metal smelting and refining machinery, except furnaces and ovens
 3469 Metal spinning for the trade
 2899 Metal treating compounds
 3291 Metallic abrasives
 2641 Metallic covered paper, *m/pcm*
 3861 Metallic emulsion sensitized paper and cloth, photographic
 2816 Metallic pigments, inorganic
 2869 Metallic salts of acyclic organic chemicals
 2869 Metallic stearate
 2295 Metallizing of fabrics
 3832 Metallographs
 2819 Metals, alkali
 2819 Metals, liquid
 3832 Meteorological instruments, optical
 3811 Meteorological instruments: laboratory, except optical
 3272 Meter boxes, concrete
 3951 Meter pens
 3613 Metering panels, electric
 3825 Meters, electric: pocket, portable, panel-board, and graphic recording
 3579 Meters, postage
 3825 Meters, power factor and phase angle
 3824 Meters: gas, liquid tallying and mechanical measuring—except electrical
 2861 Methanol, natural (wood alcohol)
 2869 Methanol, synthetic (methyl alcohol)
 2861 Methyl acetone
 2821 Methyl acrylate resins
 2861 Methyl alcohol, natural (wood alcohol)
 2869 Methyl alcohol, synthetic (methanol)
 2821 Methyl cellulose plastics
 2869 Methyl chloride
 2821 Methyl methacrylate resins
 2869 Methyl perhydrofluorine
 2869 Methyl salicylate
 2865 Methyl violet toners
 2869 Methylamine
 2869 Methylene chloride
 2832 Mexican foods, canned
 3299 Mica products, built-up and sheet, except radio parts
 3299 Mica splitting
 3295 Mica, ground or otherwise treated
 3299 Mica, laminated
 3674 Microcircuits, integrated (semiconductor)
 3861 Microfilm equipment: cameras, projectors, readers, etc.
 3811 Micromanipulator
 3545 Micrometers
 3651 Microphones
 3832 Microprobes, electron
 3832 Microprojectors
 2741 Micropublishing
 3069 Microscope covers, rubber
 3841 Microscopes, corneal
 3832 Microscopes, except corneal
 3811 Microtomes
 3662 Microwave communication equipment
 3679 Microwave components
 3589 Microwave ovens (cooking equipment) commercial
 3631 Microwave ovens, household
 3825 Microwave test equipment
 2361 "Middies": girls, children's, and infants—*m/pcm*
 3799 Midget autos, power driven
 2261 Mildew proofing cotton broad woven fabrics
 3999 Military insignia, except textile
 2399 Military insignia, textile
 2899 Military pyrotechnics
 2311 Military uniforms, men's and youths'
 3412 Milk (fluid) shipping containers, steel or other metal
 3221 Milk bottles, glass
 2654 Milk bottles, paper: *m/pcm*
 3411 Milk cans, metal
 2631 Milk carton board, *misc*
 **** Milk cooling stations, operated by milk processors—code as auxiliary
 2645 Milk filter disks, die-cut from purchased paper
 2621 Milk filter disks, *misc*
 2023 Milk preparations, dried
 2026 Milk processing (pasteurizing, homogenizing, bottling) and distribution
 3551 Milk processing machinery
 2026 Milk products, made from fresh skim milk
 **** Milk receiving stations for processing plants—code as auxiliary
 3551 Milk testers
 2026 Milk, acidophilus
 2026 Milk, bottled
 2823 Milk, sugar of
 2023 Milk, whole: canned
 2023 Milk: concentrated, condensed, dried, evaporated, and powdered
 3523 Milking machines

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STANDARD INDUSTRIAL CLASSIFICATION

- 2269 Mill menders, contract: cotton, silk, and man-made fiber
- 2231 Mill menders, contract: wool, mohair, and similar fibers
- 3199 Mill strapping for textile mills, leather
- 3547 Mill tables (rolling mill equipment)
- 3292 Millboard, asbestos
- 2351 Millinery
- 2396 Millinery braids and trimmings, *m/ym*
- 2396 Millinery linings
- 3545 Milling cutters
- 3545 Milling machine attachments (machine tool accessories)
- 3541 Milling machines (machine tools)
- 2833 Milling of drugs and herbs
- 2041 Milling of grains, except rice
- 2044 Milling of rice
- 3551 Mills and presses: beet, cider, sugar cane, etc.
- 2431 Millwork products
- 2491 Millwork, treated
- 3579 Mimeographs (duplicating machines)
- 2032 Mincemeat, canned
- 3536 Mine hoists
- 2491 Mine props, treated
- 2411 Mine timbers, hewn
- 2816 Mineral colors and pigments
- 2048 Mineral feed supplements
- 2911 Mineral jelly, produced in petroleum refineries
- 3532 Mineral machinery and equipment
- 2911 Mineral oils, natural
- 2086 Mineral water, carbonated: bottled or canned
- **** Mineral water, uncarbonated: bottled—see nonmanufacturing
- 2911 Mineral waxes, natural
- 3296 Mineral wool for insulation
- 3648 Miners' lamps
- 3483 Mines and parts (ordnance)
- 3532 Mining cars and trucks (dollies)
- 3743 Mining locomotives and parts, electric or nonelectric
- 3532 Mining machinery and equipment, except oil field machinery and tools
- 2816 Minium (pigment)
- 2499 Mirror frames, wood or metal
- 2499 Mirror framing for the trade
- 3231 Mirrors, framed or unframed: made from purchased glass
- 3832 Mirrors, optical
- 3832 Mirrors, searchlight
- 3231 Mirrors, truck and automobile: made from purchased glass
- 3662 Missile control systems
- 3662 Missile fuel management systems
- 3443 Missile silos and components, metal plate
- 3483 Missile warheads
- 3761 Missiles, ballistic: completely assembled
- 3761 Missiles, guided: completely assembled
- 3423 Mitre boxes, metal
- 2211 Mitten flannel, cotton
- 3151 Mittens, leather
- 2259 Mittens, made in knitting mills
- 3069 Mittens, rubber
- 2381 Mittens: except knit, all-leather, rubber, plastic and asbestos
- 3949 Mitts and gloves, baseball
- 2819 Mixed acid
- 3551 Mixers and whippers, electric: for food manufacturing industries
- 3551 Mixers, feed: except agricultural machinery
- 3551 Mixers, food: commercial types
- 3634 Mixers, food: electric
- 3443 Mixers, for hot metal
- 3581 Mixers: concrete, ore, sand, slag, plaster, mortar, and bituminous
- 2451 Mobile buildings for commercial use (offices, banks, etc.)
- 2451 Mobile classrooms
- 3662 Mobile communication equipment
- 2451 Mobile dwellings
- 2451 Mobile homes, except recreational
- 3711 Mobile lounges (motor vehicle)
- 3149 Moccasins
- 2221 Modacrylic broad woven fabrics
- 2824 Modacrylic fibers
- 2281 Modacrylic yarn, made from purchased staple: spun
- 3952 Modeling clay
- 3842 Models, anatomical
- 3999 Models, except toy and hobby airplane, boat, ship, railroad, etc.
- 3944 Models, toy and hobby: airplane, boat, ship, railroad equipment, etc.
- 3662 Modems, except telephone and telegraph data sets
- 3674 Modules, solid state
- 2231 Mohair broad woven fabrics
- 2283 Mohair yarn: spinning, twisting, winding, or spooling

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3579 Moisteners, gummed tape: for store and office use
 3569 Moisteners, label: industrial
 3829 Moisture density meters, except industrial process type
 3823 Moisture meters, industrial process type
 2061 Molasses, blackstrap
 2063 Molasses, made from sugar beets
 2061 Molasses, made from sugarcane
 2099 Molasses, mixed or blended: *mfp*
 3069 Molded rubber products
 2821 Molding compounds, plastics
 3079 Molding primary plastics, for the trade
 3465 Moldings and trim, automobile: stamped
 3442 Moldings and trim, metal and metal covered: except automobile
 3299 Moldings, architectural: plaster of paris—factory production only
 2499 Moldings, picture frame: finished
 2431 Moldings, wood: unfinished and pre-finished
 3963 Molds, button
 3544 Molds, industrial: metal
 3674 Molecular devices, solid state
 2211 Moleskins, *mitse*
 3313 Molybdenum silicon, not produced in blast furnaces
 2211 Momie crepe, cotton
 2399 Money belts, made of any material
 3499 Money chests, steel
 2869 Monochlorodifluoromethane
 3079 Monofilaments, nontextile
 3674 Monolithic integrated circuits (solid state)
 2869 Monomethylparaminophenol sulfate
 3536 Monorail systems
 2869 Monosodium glutamate
 2791 Monotype composition, for the printing trade
 3555 Monotype machines
 **** Montan wax, synthetic—code according to material from which made
 3272 Monuments, concrete
 3281 Monuments, cut stone: not including only finishing or lettering to order
 **** Monuments, finishing and lettering to order—see nonmanufacturing
 3589 Mop wringers
 2392 Mops, floor and dust
 2843 Mordants
 2833 Morphine and derivatives
 3531 Mortar mixers
 3483 Mortar shells, over 30 mm. (or over 1.18 inch)
 3397 Mortar, high temperature: nonclay
 3255 Mortars, clay refractory
 3489 Mortars, over 30 mm. (or over 1.18 inch)
 3553 Mortisers (woodworking machines)
 3253 Mosaic tile, ceramic: glazed and unglazed
 3231 Mosaics, glass: made from purchased glass
 3999 Mosaics: ivory, shell, horn, and bone
 2211 Mosquito netting, *mitse*
 2258 Mosquito netting, warp knit: *mitse*
 2879 Moth repellants
 2643 Mothproof bags, *mfp*
 3861 Motion picture apparatus and equipment
 3861 Motion picture film
 3711 Motor buses, except trackless trolley
 3622 Motor controls, electric
 3694 Motor generator sets, automotive
 3621 Motor generator sets, except automotive and turbo-generators
 3792 Motor homes, self-contained
 3621 Motor housings
 3069 Motor mounting rings, rubber covered (rubber bonded)
 3751 Motor scooters and parts
 3622 Motor starters and controllers, electric
 3576 Motor truck scales
 3715 Motor truck trailers
 3711 Motor trucks, except off-highway
 3714 Motor vehicle engine rebuilding, on a factory basis
 3429 Motor vehicle hardware
 3714 Motor vehicle parts and accessories (except motor vehicle stampings)
 3711 Motor vehicles, including amphibian
 3751 Motorbikes and parts
 3732 Motorboats, inboard and outboard: building and repairing
 3647 Motorcycle lamps
 3751 Motorcycles and parts
 3569 Motors, air or hydraulic (fluid power)
 3621 Motors, electric: except starting motors
 3519 Motors, outboard
 3724 Motors, rocket: aircraft
 3764 Motors, rocket: guided missile
 3621 Motors, servo and torque
 3694 Motors, starting: automotive and aircraft
 3569 Motors, water
 2371 Mounting heads on fur neckpieces
 2789 Mounting of maps and samples, for the trade

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STANDARD INDUSTRIAL CLASSIFICATION

3999 Mountings, comb and hairpin: except precious metal
 3851 Mountings, eyeglass and spectacle
 3911 Mountings, gold and silver: for pens, leather goods, umbrellas, etc.
 3484 Mounts, for guns 80 mm. (or 1.18 inch) and below
 3489 Mounts, gun: for artillery over 80 mm. (or over 1.18 inch)
 2645 Mounts, photograph: *m/psm*
 2844 Mouth washes
 3931 Mouthpieces for musical instruments
 3969 Mouthpieces for pipes, cigarette holders, etc.—rubber
 3873 Movements, watch or clock
 3534 Moving stairways
 3523 Mowers and mower-conditioners, hay
 2891 Mucilage
 3531 Mud jacks
 2899 Mud, drilling
 3714 Mufflers, exhaust: motor vehicle
 2253 Mufflers, *mitae*
 2323 Mufflers: men's, youths', and boys'—*m/psm*
 2499 Mulch, wood and bark
 3541 Multi-function metal cutting machine tools
 3825 Multimeters
 3231 Multiple-glazed insulating units, made from purchased glass
 3211 Multiple-glazed insulating units, *mitae*
 3662 Multiplex equipment
 2819 Muriate of potash, not produced at mines
 **** Muriate of potash, produced at mines—see nonmanufacturing
 3841 Muscle exercise apparatus, ophthalmic
 2033 Mushrooms, canned
 3651 Music distribution apparatus, except records or tape
 3931 Music rolls, perforated
 3931 Music stands
 2731 Music, book: publishing and printing, or publishing only
 2732 Music, book: printing, printing and binding—not publishing
 2754 Music, sheet: gravure printing (not publishing)
 2751 Music, sheet: letterpress and screen printing (not publishing)
 2741 Music, sheet: publishing and printing, or publishing only
 3999 Musical chests
 3931 Musical instrument accessories: reeds, mouthpieces, stands, traps, etc.

3651 Musical instrument amplifiers
 3161 Musical instrument cases
 3931 Musical instruments and parts
 3944 Musical instruments, toy
 2211 Muslin, cotton
 2869 Mustard gas
 2035 Mustard, prepared (wet)
 2011 Mutton, *mitae*
 3199 Muzzles, horse and dog
 2861 Myrobalans extract

N

2833 N-methylpiperazine
 2822 N-type rubber
 3728 Nacelles, aircraft
 3542 Nail heading machines
 3315 Nails, steel: wire or cut
 3399 Nails: aluminum, brass, and other non-ferrous metal and wire
 2211 Nainsook, cotton
 3993 Name plates, metal: except engraved, etched, etc.
 3479 Name plates: engraved, etched, etc.
 2899 Napalm
 2911 Naphtha, produced in petroleum refineries
 2865 Naphtha, solvent: product of coal tar distillation
 2865 Napthalene chips and flakes
 2869 Napthalene sulfonic acid condensates
 2865 Napthalene, product of coal tar distillation
 2851 Naphthanate driers
 2869 Naphthenic acid soaps
 2911 Naphthenic acids
 2865 Naphthol, alpha and beta
 2865 Naphtholsulfonic acids
 2621 Napkin stock, paper
 2392 Napkins, fabric and nonwoven textiles: *m/psm*
 2647 Napkins, paper: *m/psm*
 2647 Napkins, sanitary: *m/psm*
 3552 Napping machines (textile machinery)
 2261 Napping of cotton broad woven fabrics
 2262 Napping of man-made fiber and silk broad woven fabrics
 2231 Napping of wool, mohair, and similar fiber fabrics
 2241 Narrow fabrics, elastic: woven or braided
 2269 Narrow fabrics, except knit and wool: bleaching, dyeing, and finishing
 2231 Narrow fabrics: dyeing and finishing of wool, mohair, and similar fibers

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2241 Narrow woven fabrics: cotton, wool, silk, glass, and man-made fiber
- 2299 Narrow woven fabrics: linen, jute, hemp, and ramie
- 2032 "Native" foods, canned
- 2038 "Native" foods, frozen
- 3811 Nautical instruments
- 3489 Naval artillery
- 3731 Naval ships, building and repairing
- 2861 Naval stores, gum: processing but not gathering or warehousing
- **** Naval stores, gum: processing on the farm—see nonmanufacturing
- 2861 Naval stores, wood
- 3662 Navigational electronic equipment (ILS, DME, VOR, TACAN)
- 3811 Navigational instruments
- 2082 Near beer
- 2077 Neat's-foot oil
- 2371 Neckpieces, fur
- 2221 Necktie fabrics, man-made fiber and silk: broad woven
- 2396 Necktie linings, cutting of
- 2253 Neckties, *mitse*
- 2323 Neckties: men's, youths', and boys'—*mfp*
- 2339 Neckwear, women's: *mfp*
- 2323 Neckwear: men's, youths', and boys'—*mfp*
- 2033 Nectars, fruit
- 3841 Needle holders, surgical
- 3964 Needles, hand and machine
- 3841 Needles, hypodermic
- 3841 Needles, suture
- 2395 Needlework, art: *mfp*
- 2341 Negligees: women's, children's, and infants'
- 2813 Neon
- 3993 Neon signs
- 2822 Neoprene
- 3832 Nephelometers
- 3552 Net and lace machines
- 2211 Nets and nettings, *mitse*
- 2399 Nets, fishing: *mfp*
- 3999 Nets, hair
- 2399 Nets, launderers' and dyers'
- 2298 Nets, rope
- 3949 Nets: badminton, basketball, tennis, etc.—not made in weaving mills
- 2292 Netting made on a lace or net machine
- 2258 Netting, knit
- 2258 Netting, mosquito: warp knit—*mitse*
- 3079 Netting, plastics
- 3496 Netting, woven wire: made from purchased wire
- 3825 Network analyzers
- 2084 Neutral fruit spirits and neutral brandy
- 2085 Neutral spirits for beverage purposes, except fruit
- 2431 Newel posts, wood
- 2621 News tablet paper, *mitse*
- 2631 Newsboard, *mitse*
- 2645 Newsboard, pasted: *mfp*
- 2711 Newspaper branch offices, editorial and advertising
- 2752 Newspapers, lithographing only
- 2754 Newspapers: gravure printing (not publishing)
- 2751 Newspapers: letterpress printing (not publishing)
- 2711 Newspapers: publishing and printing, or publishing only
- 2621 Newsprint
- 2648 Newsprint tablets and pads, *mfp*
- 3951 Nibs (pen points): gold, steel, or other metal
- 2819 Nickel ammonium sulfate
- 3356 Nickel and nickel alloy pipe, plates, sheets, strips, and tubing
- 2819 Nickel carbonate
- 2819 Nickel compounds, inorganic
- 3497 Nickel foil, not made in rolling mills
- 3339 Nickel refining, primary
- 3341 Nickel smelting and refining, secondary
- 2819 Nickel sulfate
- 2879 Nicotine and salts
- 2879 Nicotine bearing insecticides
- 2321 Nightshirts: men's, youths', and boys'—*mfp*
- 2254 Nightwear, *mitse*
- 2321 Nightwear: men's, youths', and boys' (except robes)—*mfp*
- 2341 Nightwear: women's, misses', children's, and infants'—*mfp*
- 3498 Nipples, pipe: except pressure and soil pipe
- 3321 Nipples, pipe: pressure and soil pipe—cast iron
- 3069 Nipples, rubber
- 2821 Nitrate, cellulose resins
- 2892 Nitrated carbohydrates (explosives)
- 2873 Nitric acid
- 2822 Nitrile type rubber
- 2822 Nitrile-butadiene rubbers
- 2822 Nitrile-chloroprene rubbers
- 2865 Nitro dyes

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STANDARD INDUSTRIAL CLASSIFICATION

- 2865 Nitroaniline
 2865 Nitrobenzene
 2823 Nitrocellulose fibers
 2821 Nitrocellulose plastics (pyroxylin)
 2892 Nitrocellulose powder (explosive)
 2834 Nitrofurran preparations
 2818 Nitrogen
 2873 Nitrogen solutions (fertilizer)
 2892 Nitroglycerin (explosive)
 2892 Nitromannitol (explosive)
 2865 Nitrophenol
 2865 Nitroso dyes
 2892 Nitrostarch (explosive)
 2892 Nitrosugars (explosives)
 2869 Nitrous ether
 2818 Nitrous oxide
 2834 Nitrous oxide for anesthetic use
 3321 Nodular iron castings
 2299 Nolls, wool and mohair
 3842 Noise protectors, personal
 2096 Nonalcoholic beverages, bottled or canned
 3297 Nonclay refractories
 3313 Nonferrous additive alloys, high percentage: except copper
 3369 Nonferrous castings, except aluminum, copper, and copper alloys
 3463 Nonferrous forgings not made in hot rolling mills
 3369 Nonferrous foundries: except aluminum, copper, and copper alloys
 3362 Nonferrous foundries: brass, bronze, copper, and copper base alloy
 3362 Nonferrous metal and die castings: copper and copper alloys
 3341 Nonferrous metal smelting and refining, secondary
 3341 Nonferrous metals, recovering and refining
 3339 Nonferrous refining, primary: except copper, lead, zinc, and aluminum
 3356 Nonferrous rolling, drawing, and extruding: except copper and aluminum
 3339 Nonferrous smelting, primary: except copper, lead, zinc, and aluminum
 2297 Nonwoven textiles, except wool
 2098 Noodles: egg, plain, and water
 2869 Normal hexyl decalin
 3769 Nose cones, guided missile
 3842 Nose plugs
 2648 Notebooks, including mechanically bound by wire, plastic, etc.—*mfgpm*
 2292 Nottingham lace
 3499 Novelties and specialties, metal: except advertising novelties
 3993 Novelties, advertising
 3961 Novelties, costume: except precious metal and glass gems
 3231 Novelties, glass: fruit, foliage, flowers, animals, etc.—*mfgpm*
 3199 Novelties, leather
 2649 Novelties, paper: *mfgpm*
 3079 Novelties, plastics
 2499 Novelties, wood fiber
 3999 Novelties: bone, beaded, and shell
 2514 Novelty furniture, metal
 2511 Novelty furniture, wood
 3229 Novelty glassware
 2395 Novelty stitching, for the trade
 3429 Nozzles, fire fighting
 3432 Nozzles, lawn hose
 3432 Nozzles, plumbers'
 3499 Nozzles, spray: aerosol, paint, and insecticide
 3443 Nuclear core structurals, metal plate
 2819 Nuclear cores, inorganic
 3674 Nuclear detectors, solid state
 2819 Nuclear fuel reactor cores, inorganic
 2819 Nuclear fuel scrap reprocessing
 2869 Nuclear fuels, organic
 3829 Nuclear instrument modules
 3832 Nuclear magnetic resonance type apparatus
 3829 Nuclear radiation detection and monitoring instruments
 3559 Nuclear reactor control rod and drive mechanism
 3823 Nuclear reactor controls
 3443 Nuclear reactors, military and industrial
 3443 Nuclear shielding, metal plate
 3579 Numbering machines, office and store: mechanical
 3953 Numbering stamps, with rubber type: hand
 3541 Numerically controlled metal cutting machine tools
 2514 Nursery furniture, metal
 2511 Nursery furniture, wood
 3339 Nurses' washable service apparel
 3429 Nut crackers and pickers, metal
 2079 Nut margarine
 3312 Nut rods, iron and steel: made in steel works or rolling mills
 3523 Nut shellers (agricultural machinery)
 3452 Nuts

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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2034 Nuts, dried or dehydrated
 2065 Nuts, glace
 2065 Nuts, salted or candy covered: packaged
 2221 Nylon broad woven fabrics
 2824 Nylon fibers and bristles
 2821 Nylon resins
 2284 Nylon thread
 2281 Nylon yarn, spinning of staple
 2282 Nylon yarn: throwing, twisting, winding
 or spooling of continuous filament
 2221 Nylril broad woven fabrics
 2281 Nylril yarn, made from purchased staple:
 spun

O

2861 Oak extract
 2284 Oakum
 2499 Oars, wood
 2043 Oatmeal (cereal breakfast food)
 2043 Oats, rolled (cereal breakfast food)
 2048 Oats: crimped, pulverized and rolled (ex-
 cept breakfast food)
 3662 Object detection apparatus (radar)
 3931 Oboes
 3931 Ocarinas
 2816 Others
 3931 Octophones
 3824 Odometers
 3489 Oerlikon guns
 2599 Office fixtures, except metal and wood
 2542 Office fixtures, metal
 2541 Office fixtures, wood
 2522 Office furniture, metal: padded or plain
 2521 Office furniture, wood: padded, uphol-
 stered, or plain
 3573 Office machine control panels
 2621 Offset paper
 3555 Offset plates
 2752 Offset printing
 3825 Ohmmeters
 2077 Oil and meal, fish
 3433 Oil burners, domestic and industrial
 3411 Oil cans, metal
 3599 Oil cups, metal
 3533 Oil field machinery and equipment
 3599 Oil filters, internal combustion engine
 3586 Oil measuring and dispensing pumps
 2851 Oil paint
 3829 Oil pressure gauges, motor vehicle
 3293 Oil seals, asbestos
 3293 Oil seals, leather
 3293 Oil seals, rubber
 2851 Oil stains
 2911 Oil still gas, produced in petroleum re-
 fineries
 3443 Oil storage tanks, metal plate
 3714 Oil strainers, motor vehicle
 2899 Oil treating compounds
 2911 Oil, acid
 2865 Oil, aniline
 2046 Oil, corn: crude and refined
 2074 Oil, cottonseed
 2865 Oil, creosote: product of coal tar distil-
 lation
 2077 Oil, neat's-foot
 2079 Oil, olive
 2861 Oil, pine: produced by distillation of
 pine gum or pine wood
 2899 Oil, red (oleic acid)
 2075 Oil, soybean
 2843 Oil, turkey red
 2295 Oilcloth
 2641 Oiled paper, *m/ps*
 2992 Oils and greases, blending and com-
 pounding from purchased materials
 2077 Oils, animal
 2844 Oils, cosmetic
 2899 Oils, essential
 2077 Oils, fish and marine animal: herring.
 menhaden, whale (refined), sardine
 2992 Oils, lubricating: not made in petroleum
 refineries
 2992 Oils, lubricating: re-refining
 2911 Oils, partly refined: sold for rerunning—
 produced in refineries
 2843 Oils, soluble (textile assistants)
 2843 Oils, sulfonated
 2079 Oils, vegetable (except corn oil) refined:
 cooking and salad
 2833 Oils, vegetable and animal: medicinal
 grade—refined and concentrated
 2076 Oils, vegetable: except corn, cottonseed
 and soybean
 2861 Oils, wood: product of hardwood distil-
 lation
 2911 Oils: fuel, lubricating, and illumina-
 ting—produced in petroleum refineries
 2865 Oils: light, medium, and heavy—product
 of coal tar distillation
 3291 Oilstones, artificial
 2834 Ointments
 2076 Oiticica oil
 2851 Oleate driers
 2824 Olefin fibers
 2899 Oleic acid (red oil)

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STANDARD INDUSTRIAL CLASSIFICATION

2869	Oleic acid esters	3446	Ornamental and architectural metal work
3728	Oleo struts, aircraft	3299	Ornamental and architectural plaster work: mantels, columns, etc.
2079	Oleomargarine	3646	Ornamental lighting fixtures, commercial
2819	Oleum (fuming sulfuric acid)	2431	Ornamental woodwork: cornices, mantels, etc.
2079	Olive oil	3231	Ornamented glass, made from purchased glass
2035	Olives, brined: bulk	3699	Ornaments, christmas tree: electric
2034	Olives, dried	3999	Ornaments, christmas tree: except glass and electric
2033	Olives, including stuffed: bottled	3229	Ornaments, christmas tree: glass— <i>mitse</i>
3811	Omni-bearing indicators	3231	Ornaments, christmas tree: made from purchased glass
2035	Onions, pickled	3961	Ornaments, costume: except precious metal and gems
3211	Opalescent flat glass	3131	Ornaments, shoe
2211	Opaline, cotton	2899	Orris oil
3496	Openers, bottle: made from purchased wire	2865	Orthodichlorobenzene
3832	Opera glasses	3843	Orthodontic appliances
2352	Opera hats	3842	Orthopedic devices and materials
3841	Operating tables	3842	Orthopedic hosiery, elastic
3229	Ophthalmic glass, except flat	3275	Orthopedic plaster, gypsum
3211	Ophthalmic glass, flat	3149	Orthopedic shoes, children's: except extension shoes
3841	Ophthalmic instruments and apparatus	3842	Orthopedic shoes, extension
3229	Ophthalmic lens blanks	3143	Orthopedic shoes, men's: except extension shoes
3851	Ophthalmic lens grinding	3144	Orthopedic shoes, women's: except extension shoes
3841	Ophthalmometers and ophthalmoscopes	3069	Orthopedic sundries, molded rubber
2833	Opium derivatives	3825	Oscillators, audio frequency and radio frequency (instrument types)
3832	Optical comparators	3679	Oscillators, except laboratory type
3832	Optical elements and assemblies, except ophthalmic	3825	Oscillographs and oscilloscopes
3229	Optical glass blanks	2211	Osnaburges
3211	Optical glass, flat	2899	Ossein
3851	Optical grinding service for the trade	3962	Ostrich feathers: curling, dyeing, and renovating for the trade
3229	Optical lens blanks	3841	Otosopes
3545	Optical measuring devices	3519	Outboard motors
3832	Optical measuring instruments	2253	Outerwear, except hosiery and gloves: <i>mitse</i>
3573	Optical readers and scanners	2253	Outerwear, hand knitted: for the trade
3841	Optometers	2211	Outing flannel, cotton
2899	Orange oil	3644	Outlet boxes (electric wiring devices)
3569	Ordnance testing chambers	3643	Outlets, convenience: electric
3532	Ore and aggregate feeders	3822	Oven temperature controls, non-industrial
3532	Ore crushing, washing, screening, and loading machinery	3551	Ovens, bakery
3429	Organ hardware	3589	Ovens, cafeteria food warming: portable
3931	Organ parts and materials, except organ hardware	3631	Ovens, household: except portable
2211	Organdy, cotton		
2869	Organic chemicals, acyclic		
2865	Organic colors, full strength		
2824	Organic fibers, synthetic: except cellulose		
2833	Organic medicinal chemicals: bulk, uncompounded		
2865	Organic pigments (lakes and toners)		
3931	Organs, all types: pipe, reed, hand, street, barrel, electronic, player		

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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3634 Ovens, household: portable
 3567 Ovens, industrial process: except bakery
 3589 Ovens, microwave (cooking equipment): commercial
 3567 Ovens, sherardizing
 3567 Ovens, smelting
 3569 Ovens, surveillance: for aging and testing powder
 3229 Ovenware, glass
 2328 Overall jackets
 2328 Overalls
 2231 Overcoatings, of wool, mohair, and similar fibers
 2311 Overcoats: men's, youths', and boys'
 3535 Overhead conveyor systems for general industrial use
 3442 Overhead garage doors, metal
 2262 Overprinting man-made fiber and silk broad woven fabrics
 3021 Overshoes, plastics
 3021 Overshoes, rubber or rubber soled fabric
 2833 Ox bile salts and derivatives: bulk, un-compounded
 2869 Oxalates
 2869 Oxalic acid and metallic salts
 2211 Oxfords (cotton fabrics)
 2899 Oxidizers, inorganic
 2819 Oxidation catalyst made from porcelain
 3728 Oxygen systems, for aircraft
 3841 Oxygen tents
 2813 Oxygen, compressed and liquefied
 3732 Oyster boats, building and repairing
 2048 Oyster shells, ground: used as feed for animals and fowls
 2091 Oysters, canned and preserved
 2092 Oysters, fresh: shucking and packing in nonsealed containers
 3559 Ozone machines

P

3693 Pacemaker, cardiac
 3069 Pacifiers, rubber
 3549 Pack-up assemblies (wheel overhaul)
 3412 Packages, shipping: liquid tight—metal
 3551 Packaging machinery, food products
 3569 Packaging machines, for general industrial use: except food
 3411 Packers' cans, metal
 2899 Packers' salt
 3221 Packers' ware (containers), glass
 2441 Packing cases, wood: nailed or lock corner

3293 Packing for steam engines, pipe joints, air compressors, etc.
 3551 Packing house machinery
 3079 Packing materials, plastic (sheet, shredded, or rigid foam)
 3293 Packing, metallic
 3293 Packing, rubber
 2294 Packing, twisted jute
 3293 Packing: cup, U valve, etc.—leather
 3021 Pads: rubber or rubber soled fabric
 2293 Padding and wadding, except excelsior
 3429 Padlocks
 2291 Pads and padding, felt: except woven
 3292 Pads and padding, table: asbestos
 2392 Pads and padding, table: except asbestos, felt, rattan, reed, and willow
 2653 Pads, corrugated and solid fiberboard: *mfp*
 2648 Pads, desk: paper—*mfp*
 2429 Pads, excelsior
 2293 Pads, fiber: henequen, sisal,istle
 3842 Pads, incontinent and bed
 3953 Pads, inking and stamping
 3069 Pads, kneeling: rubber
 3999 Pads, permanent waving
 3291 Pads, scouring: soap impregnated
 2396 Pads, shoulder: for coats, suits, etc.—men's and women's
 2499 Pads, table: rattan, reed, and willow
 3949 Pads: football, basketball, soccer, lacrosse, etc.
 3549 Pail mills
 3411 Pails, except shipping and stamped: metal
 3079 Pails, plastics
 2449 Pails, plywood
 2654 Pails, sanitary food: *mfp*
 3412 Pails, shipping: metal—except tinned
 3469 Pails, stamped and pressed metal: except tinned and shipping type
 2449 Pails, wood: coopered
 2842 Paint and wallpaper cleaners
 3567 Paint baking and drying ovens
 2851 Paint brush cleaners
 3991 Paint brushes
 2851 Paint driers
 3559 Paint making machinery
 2816 Paint pigments, inorganic
 2865 Paint pigments, organic
 2851 Paint primers
 2851 Paint removers
 3991 Paint rollers
 3944 Paint sets, children's
 3563 Paint sprayers

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STANDARD INDUSTRIAL CLASSIFICATION

- 2499 Paint sticks, wood
 3952 Paint, gold or bronze
 3479 Painting (enameling and varnishing) of metal products for the trade
 3999 Painting instrument dials, for the trade
 **** Painting ships—see nonmanufacturing
 3952 Paints for burnt wood or leather work, platinum
 3952 Paints, artists'
 2851 Paints, asphalt and bituminous
 3952 Paints, for china painting
 2851 Paints, plastic texture: paste and dry
 2851 Paints, waterproof
 2851 Paints: oil and alkyd vehicle, and water thinned
 2211 Pajama checks, textile
 2254 Pajamas, *mitse*
 2321 Pajamas: men's, youths', and boys'—*m/psm*
 2341 Pajamas: women's, misses', children's and infants'—*m/psm*
 3952 Palettes, artists'
 3537 Pallet assemblies for landing mats
 2448 Pallet containers, wood or wood and metal combination
 2542 Pallet racks, metal
 2649 Pallet spacers, fiber: *m/psm*
 2448 Pallets and skids, wood or wood and metal combination
 2653 Pallets, corrugated and solid fiberboard: *m/psm*
 3537 Pallets, metal
 2448 Pallets, wood
 2076 Palm kernel oil
 2789 Pamphlets, binding only
 2732 Pamphlets: printing, or printing and binding—not publishing
 2731 Pamphlets: publishing and printing, or publishing only
 3479 Pan glazing for the trade
 2352 Panama hats, men's and boys'
 2045 Pancake flour, prepared: *m/psm*
 2099 Pancake sirup, blended and mixed
 3728 Panel assemblies (hydromatic propeller test stands), aircraft
 2431 Panel work, wood
 3823 Panelboard indicators, recorders and controllers: receiver type
 3613 Panelboards and distribution boards, electric
 3272 Panels and sections, prefabricated: concrete
 3448 Panels for prefabricated metal buildings
 2452 Panels for prefabricated wood buildings
 3079 Panels, building: corrugated and flat—plastics
 2645 Panels, cardboard: *m/psm*
 3613 Panels, electric control and metering
 2435 Panels, hardwood plywood
 3299 Panels, papier mache or plaster of paris
 3275 Panels, plaster: gypsum
 2436 Panels, softwood plywood
 3832 Panoramic telescopes
 2655 Pans and voids, fiber or cardboard: *m/psm*
 3469 Pans, stamped and pressed metal: except tinned
 3411 Pans, tinned
 2341 Panties, *m/psm*
 2254 Panties, *mitse*
 2231 Pantings: of wool, mohair, and similar fibers
 3952 Pantographs, for drafting
 2335 Pants dresses, *m/psm*
 2339 Pants outfits, except pantsuits and pants dresses
 2329 Pants, athletic and gymnasium: men's, youths', and boys'
 3069 Pants, baby: vulcanized rubber and rubberized fabric—*mitse*
 2327 Pants, dress (separate): men's, youths', and boys'
 2385 Pants, waterproof: *m/psm*
 2328 Pants, work
 2363 Pantsuits: girls', children's, and infants'—*m/psm*
 2337 Pantsuits: women's, misses' and juniors'
 2251 Panty hose
 2221 Paper broad woven fabrics
 2789 Paper bronzing, gilding, edging, and deckling
 3496 Paper clips and fasteners, made from purchased wire
 3579 Paper cutters and trimmers (hand office equipment)
 3544 Paper cutting dies
 2789 Paper cutting, except diecutting
 2645 Paper diecutting, from purchased materials
 2335 Paper dresses
 3496 Paper machine wire cloth, made from purchased wire
 3554 Paper mill machinery: platers, slitting, waxing, etc.
 2621 Paper mills, except building paper mills
 2647 Paper napkins, *m/psm*

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3554 Paper product machines, except printing machines
 3579 Paper punches, hand
 2782 Paper ruling
 3555 Paper ruling and sewing machines (bookbinders' machinery)
 3482 Paper shells, 30 mm. (or 1.18 inch) and below: empty, blank, and loaded
 3953 Paper stencils
 3573 Paper tape punches and readers
 3291 Paper, abrasive
 2661 Paper, asphalt: laminated
 2649 Paper, building: laminated—*mfp*
 2661 Paper, building: *mitse*
 3955 Paper, carbon: for typewriters, sales-books, etc.
 2782 Paper, chart and graph: ruled
 2641 Paper, coated and glazed (except photographic, carbon, and abrasive): *mfp*
 2649 Paper, corrugated: *mfp*
 2649 Paper, crepe; and crepe paper products: *mfp*
 2621 Paper, except building paper: *mitse*
 3952 Paper, frisket (artists' material)
 3861 Paper, heat sensitized: made from purchased paper
 3861 Paper, photographic: sensitized—all types
 3291 Paper: garnet, emery, aluminum oxide, and flint
 2651 Paperboard backs for blister or skin packages: *mfp*
 2645 Paperboard diecutting, from purchased materials
 2631 Paperboard mills, except building board mills
 2661 Paperboard, building (containing no gypsum): *mitse*
 2631 Paperboard, except building board: *mitse*
 2231 Papermakers' felts, woven of wool, mohair, and similar fibers
 2648 Papeteries, *mfp*
 2646 Papier mache articles, except statuary and art goods—*mfp*
 2221 Parachute fabrics
 3429 Parachute hardware
 2399 Parachutes
 2911 Paraffin wax, produced in petroleum refineries
 3679 Parametric amplifiers
 3674 Parametric diodes
 3999 Parasols and frames: handles, parts, and trimmings—except precious metal
 3111 Parchment leather
 2621 Parchment paper
 2834 Parenteral solutions
 2024 Parfait
 2879 Paris green (insecticide)
 3479 Parkerizing
 3647 Parking lights, auto
 3824 Parking meters
 2426 Parquet flooring, hardwood
 3662 Particle accelerators, high voltage
 2492 Particleboard
 2899 Parting compounds (chemical foundry supplies)
 3251 Partition tile, clay
 3496 Partitions and grillework, made from purchased wire
 3446 Partitions and grillework, ornamental metal
 2653 Partitions, corrugated and solid fiberboard: *mfp*
 2542 Partitions, prefabricated: sheet metal
 2541 Partitions, prefabricated: wood
 2782 Pass books: bank, etc.
 2396 Passementeries, *mfp*
 3711 Passenger automobile bodies
 3535 Passenger baggage belt loaders
 3731 Passenger-cargo vessels, building and repairing
 3679 Passive repeaters
 2891 Paste, adhesive
 3399 Paste, metal
 3952 Pastels, artists'
 2099 Pastes, almond
 2033 Pastes, fruit and vegetable
 3551 Pasteurizing equipment (dairy machinery)
 2013 Pastrami, *mfp*
 2051 Pastries: Danish, French, etc.
 2499 Pastry boards, wood
 2899 Patching plaster, household
 2631 Patent coated paperboard, *mitse*
 3111 Patent leather
 3693 Patient monitoring apparatus
 3711 Patrol wagons (motor vehicles)
 3553 Pattern makers' machinery (woodworking)
 3469 Patterns on metal
 3565 Patterns, industrial
 2499 Patterns, last sole: regardless of material
 2741 Patterns, paper: publishing and printing, or publishing only
 3999 Patterns, shoe
 3531 Pavers

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STANDARD INDUSTRIAL CLASSIFICATION

- 2951 Paving blocks and mixtures (except brick, concrete, and cut stone), *mfgm*
 3281 Paving blocks, cut stone
 3531 Paving breakers
 3251 Paving brick, clay
 3272 Paving materials, prefabricated concrete, except blocks
 3661 PBX equipment, dial and manual
 2865 Peacock blue lake
 2099 Peanut butter
 3523 Peanut combines, diggers, packers and threshers (agricultural equipment)
 2076 Peanut oil, cake, and meal: made in peanut oil mills
 2079 Peanut oil, refined: not made in peanut oil mills
 3551 Peanut roasting machines
 2816 Pearl essence
 3322 Pearlitic castings, malleable iron
 3961 Pearls, artificial
 3915 Pearls, drilling of
 3423 Peavies (hand tools)
 2099 Pectin
 3281 Pedestals, marble
 3299 Pedestals, statuary: plaster of paris or papier mache—factory only
 2541 Pedestals, statuary: wood
 3824 Pedometers
 2411 Peeler logs
 3131 Pegs, shoe
 3532 Pellet mills (mining machinery)
 2892 Pellet powder (explosives)
 3811 Pellicle mirrors
 3999 Pelts: scraping, currying, tanning, bleaching, and dyeing
 3841 Pelvimeters
 3951 Pen points: gold, steel, or other metal
 3952 Pencil holders
 3952 Pencil lead: black, indelible, or colored
 3579 Pencil sharpeners
 2499 Pencil slats
 3952 Pencils and pencil parts, except mechanical
 3951 Pencils and pencil parts, mechanical
 3991 Pencils, hair (artists' brushes)
 3646 Pendant lamps: commercial, industrial, and institutional
 2843 Penetrants
 2899 Penetrants, inspection
 3951 Penholders and parts
 2834 Penicillin preparations
 2833 Penicillin: bulk, uncompound
 2899 Pennants
 3951 Pens and pen parts: fountain, stylographic and ball point
 3443 Penstocks, metal plate
 2865 Pentachlorophenol
 2869 Pentaerythritol
 2892 Pentolite (explosive)
 2099 Pepper, chili
 2899 Peppermint oil
 2211 Percal
 2211 Percaline, cotton
 3332 Percentage correctors
 2819 Perchloric acid
 2869 Perchloroethylene
 3634 Percolators, electric
 3482 Percussion caps, for ammunition of 80 mm. (or 1.18 inch) and below
 3931 Percussion instruments: bells, chimes, drums, xylophones, etc.
 3469 Perforated metal, stamped
 3443 Perforating on heavy metal
 3469 Perforating on light metal
 3579 Perforators (office machines)
 2844 Perfume bases, blending and compounding
 2869 Perfume materials, synthetic
 2844 Perfumes, natural and synthetic
 3332 Perimeters (optical instruments)
 2752 Periodicals, lithographing only
 2754 Periodicals: gravure printing (not publishing)
 2751 Periodicals: letterpress printing (not publishing)
 2721 Periodicals: publishing and printing, or publishing only
 3832 Periscopes
 3295 Perlite aggregate
 3295 Perlite, expanded
 2895 Permanent pleating and pressing, for the trade
 3999 Permanent wave equipment and machines
 2892 Permissible explosives
 2819 Peroxides, inorganic
 2865 Persian orange lake
 3172 Personal leather goods, small
 3842 Personal safety appliances and equipment
 3711 Personnel carriers (motor vehicles)
 3829 Personnel dosimetry devices
 2879 Pesticides, agricultural
 2879 Pesticides, household
 2047 Pet food: canned, frozen, and dry

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

531

- 2911 Petrolatums, nonmedicinal
 2911 Petroleum coke, produced in petroleum refineries
 2821 Petroleum polymer resins
 3811 Petroleum product analyzing apparatus
 3559 Petroleum refinery equipment
 2911 Petroleum refining
 2531 Pews, church
 3914 Pewter ware
 3823 pH instruments, industrial process type
 3832 pH meters
 3559 Pharmaceutical machinery
 2834 Pharmaceuticals
 3825 Phase angle meters
 3621 Phase converters (electrical apparatus)
 2866 Phenol
 2851 Phenol formaldehyde coatings, baking and air curing
 2821 Phenol-furfural resins
 2821 Phenolic resins
 2821 Phenoxy resins
 2866 Phloxine toners
 3693 Phonocardiographs
 3651 Phonograph and radio combinations
 2517 Phonograph cabinets and cases, wood
 3679 Phonograph needle cartridges
 3679 Phonograph needles
 3652 Phonograph record blanks
 3652 Phonograph records (including preparation of the master)
 3651 Phonograph turntables
 3651 Phonographs, including coin-operated
 2869 Phosgene
 2045 Phosphated flour, *m/psm*
 2819 Phosphates, except defluorinated and ammoniated
 2866 Phosphomolybdic acid lakes and toners
 2874 Phosphoric acid
 2869 Phosphoric acid esters
 2819 Phosphorus and phosphorus oxychloride
 2866 Phosphotungstic acid lakes and toners
 3861 Photo equipment, all types
 3861 Photo reconnaissance systems
 2752 Photo-lithographing
 2752 Photo-offset printing
 2791 Photocomposition
 3861 Photocopy machines
 3674 Photoelectric cells, solid state (electronic eye)
 3662 Photoelectric-cell-operated door opening and closing control devices
 2793 Photoengraving for the trade
 3555 Photoengraving machines
 2793 Photoengraving plates (halftones and linecuts)
 3641 Photoflash and photoflood lamps
 3861 Photoflash equipment, except lamps
 3811 Photogrammetry equipment
 2645 Photograph folders, mats, mounts, etc.: *m/psm*
 2499 Photograph frames, wood or metal
 3861 Photographic chemicals, prepared: not made in chemical plants
 3662 Photographic control systems, electronic
 3861 Photographic equipment and accessories
 3079 Photographic film base (nonsensitized)
 3861 Photographic instruments, electronic
 3832 Photographic lenses
 3861 Photographic paper and cloth, sensitized: all types
 3861 Photographic sensitized goods
 2754 Photogravure printing
 3832 Photometers
 3832 Photomicrographic apparatus
 3811 Photopitometers
 3861 Photosensitized paper
 3832 Phototheodolites
 3662 Phototransmission equipment, radio
 3674 Photovoltaic devices, solid state
 2869 Phthalates
 2821 Phthalic alkyd resins
 2866 Phthalic anhydride
 2821 Phthalic anhydride resins
 2866 Phthalocyanine toners
 3829 Physical properties testing and inspection equipment
 3811 Physics laboratory apparatus and instruments
 3841 Physiotherapy equipment, electrical
 2833 Physostigmine and derivatives
 2879 Phytoactin
 3811 Pi tapes (metal periphery direct reading diameter tapes)
 3429 Piano hardware
 3931 Piano parts and materials, except piano hardware
 3931 Pianos, all types: vertical, grand, spinet, player, coin-operated, etc.
 3931 Piccolos and parts
 3552 Picker machines (textile machinery)
 2426 Picker stick blanks
 3552 Picker sticks for looms
 2411 Pickets and paling: round or split
 2092 Pickling of crab meat
 3547 Picklers and pickling lines, sheet and strip (rolling mill equipment)

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STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|---|------|---|
| 2035 | Pickles and pickle salting | 3562 | Pillow block units for ball or roller bearings |
| 3423 | Picks (hand tools) | 3568 | Pillow blocks, with plain bearings |
| 3792 | Pickup coaches (campers), for mounting on pickup trucks | 2293 | Pillow filling: curled hair, cotton waste, moss, hemp tow, kapok, etc. |
| 3792 | Pickup covers, canopies or caps | 2211 | Pillow tubing, <i>mitse</i> |
| 3651 | Pickup heads, phonograph | 2292 | Pillowcases, <i>mfp</i> |
| 2892 | Picric acid (explosive) | 2211 | Pillowcases, <i>mitse</i> |
| 3811 | Pictorial deviation indicators | 2392 | Pillows, bed: <i>mfp</i> |
| 2499 | Picture frame moldings, finished | 3069 | Pillows, sponge rubber |
| 2499 | Picture frames, wood or metal | 3651 | Pillows, stereo |
| 2499 | Picture framing for the trade | 2834 | Pills, pharmaceutical |
| 3211 | Picture glass | 3641 | Pilot lights, radio |
| 3999 | Picture plaques, laminated | 3811 | Pilots, automatic, aircraft |
| 2753 | Picture post cards, engraved | 3999 | Pin ball machines |
| 2752 | Picture post cards, lithographed | 2211 | Pin checks, cotton |
| 2754 | Picture post cards: gravure printing | 3949 | Pin setters for bowling, automatic |
| 2751 | Picture post cards: letterpress and screen printing | 3915 | Pin stems (jewelry findings) |
| 3672 | Picture tube reprocessing | 2211 | Pin stripes, cotton |
| 2099 | Pie fillings, except fruits, vegetables and meat | 2649 | Pin tickets, paper: <i>mfp</i> |
| 3272 | Pier footings, prefabricated concrete | 2861 | Pine oil, produced by distillation of pine gum or pine wood |
| 2051 | Pies, except meat pies | 3961 | Pins, costume jewelry: except precious metal and gems |
| 2038 | Pies, frozen | 3964 | Pins, except jewelry: toilet, safety, hat-pins, hairpins—steel or brass |
| 2032 | Pies, meat: canned | 3911 | Pins, precious metal |
| 3679 | Piezoelectric crystals | 3292 | Pipe and boiler covering, except felt |
| 3312 | Pig iron | 2291 | Pipe and boiler covering, felt |
| 3949 | Pigeons, clay (targets) | 3498 | Pipe and fittings, fabricated from purchased pipe |
| 2865 | Pigment scarlet lake | 2646 | Pipe and fittings, fiber |
| 2816 | Pigments, inorganic | 3321 | Pipe and fittings, soil and pressure: cast iron |
| 2865 | Pigments, organic: except animal black and bone black | 3547 | Pipe and tube mills |
| 3334 | Pigs, aluminum | 3446 | Pipe bannisters, railings, guards, etc. |
| 3331 | Pigs, copper | 3999 | Pipe cleaners |
| 3332 | Pigs, lead | 3498 | Pipe couplings: fabricated from purchased pipe |
| 3339 | Pigs, magnesium | 3292 | Pipe covering (insulation), laminated asbestos paper |
| 3333 | Pigs, zinc | 3541 | Pipe cutting and threading machine (machine tools) |
| 2013 | Pigs' feet, cooked and pickled: <i>mfp</i> | 3494 | Pipe fittings, except plumbers' brass goods: metal |
| 3531 | Pile drivers (construction machinery) | 3079 | Pipe fittings, plastics |
| 3531 | Pile driving hammers | 3494 | Pipe hangers |
| 2257 | Pile fabrics, circular knit | 3498 | Pipe headers, welded: fabricated from purchased pipe |
| 2258 | Pile fabrics, warp or flat knit | 3494 | Pipe joints, expansion metal: for base-board heating |
| 2211 | Pile fabrics, cotton | 3069 | Pipe mouthpieces, molded rubber |
| 2221 | Pile fabrics, man-made fiber and silk | 2891 | Pipe sealing compounds |
| 3443 | Pile shells, metal plate | | |
| 3444 | Pile shells, sheet metal | | |
| 2491 | Piles, foundation and marine construction: treated | | |
| 3531 | Piling extractors | | |
| 3272 | Piling, prefabricated concrete | | |
| 2491 | Piling, wood: treated | | |
| 2411 | Piling, wood: untreated | | |
| 3312 | Pillings, sheet, plain: iron and steel | | |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3354 Pipe, aluminum: extruded
 3259 Pipe, chimney: clay
 3272 Pipe, concrete
 3351 Pipe, extruded and drawn: brass, bronze, and copper
 3498 Pipe, fabricated from purchased pipe
 3312 Pipe, galvanized iron and steel
 3312 Pipe, iron and steel: made in steel works or rolling mills
 3443 Pipe, large diameter: metal plate—made by plate fabricators
 3272 Pipe, lined with concrete
 3079 Pipe, plastics
 3292 Pipe, pressure: asbestos cement
 3317 Pipe, seamless steel: *mfp*
 3259 Pipe, sewer: clay
 3444 Pipe, sheet metal
 3312 Pipe, wrought: made in steel works or rolling mills
 3317 Pipe, wrought: welded, lock joint, and heavy riveted—*mfp*
 3356 Pipe: lead, magnesium, nickel, tin, zinc, and their alloys
 3714 Pipes, fuel: motor vehicle
 3931 Pipes, organ
 3999 Pipes, pipestems, and bits: tobacco—except hard rubber
 3069 Pipestems and bits, tobacco: hard rubber
 3811 Pipettes, hemocytometer
 3498 Piping systems for pulp, paper, and chemical industries
 2211 Piques, cotton
 3484 Pistols and parts, except toy
 3489 Pistols, depth charge release
 3944 Pistols, toy
 3592 Pistons and piston rings
 2861 Pit charcoal
 2865 Pitch, product of coal tar distillation
 2952 Pitch, roofing: not made in byproduct coke ovens or petroleum refineries
 2861 Pitch, wood
 3811 Pitometers
 2833 Pituitary gland derivatives: bulk, unpounded
 2834 Pituitary gland pharmaceutical preparations
 3568 Pivots, power transmission
 2041 Pizza mixes and prepared dough, *mtse*
 2045 Pizza mixes and prepared doughs, *mfp*
 2038 Pizza, frozen
 2099 Pizza, refrigerated: not frozen
 2211 Plaids, cotton
 3541 Planers (metalcutting machine tools)
 3553 Planers (woodworking machinery)
 3531 Planers, bituminous
 3555 Planes, printers'
 3423 Planes, woodworking: hand
 3811 Planimeters
 3553 Planing mill machinery
 2421 Planing mills, independent: except millwork
 2431 Planing mills, millwork
 2421 Planing mills, operated in conjunction with sawmills
 2752 Planographing
 2873 Plant foods, mixed: made in plants producing nitrogenous fertilizer
 2874 Plant foods, mixed: made in plants producing phosphatic fertilizer
 2879 Plant hormones
 3079 Planters, plastics
 3523 Planting machines, agricultural
 3231 Plants and foliage, made from purchased glass
 3962 Plants, artificial or preserved: except glass
 3999 Plaques, picture: laminated
 3299 Plaques: clay, plaster, or papier mache—factory production only
 3542 Plasma jet spray metal forming machines
 3541 Plasma process metal cutting machines, except welding machines
 2831 Plasmas
 3275 Plaster and plasterboard, gypsum
 3531 Plaster mixers
 3275 Plaster of paris
 3299 Plaster work, ornamental and architectural
 3843 Plaster, dental
 2899 Plaster, patching: household
 3449 Plastering accessories, metal
 3842 Plasters, adhesive: medicated or non-medicated
 3479 Plastic coating of metals for the trade
 3255 Plastic fire clay bricks
 2385 Plastic gowns
 2541 Plastic laminate over particleboard (fixture tops)
 3255 Plastic refractories, clay
 3297 Plastic refractories, nonclay
 2899 Plastic wood
 2869 Plasticizers, organic: cyclic and acyclic
 2851 Plastics base paints and varnishes
 3079 Plastics casting, for the trade
 3079 Plastics molding, for the trade
 3559 Plastics working machinery

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STANDARD INDUSTRIAL CLASSIFICATION

- 3079 Plastics: sheets, rods, tubes
 2851 Plastisol coating compound
 3211 Plate glass blanks for optical or ophthalmic uses
 3211 Plate glass, polished and rough
 3861 Plate holders, photographic
 2753 Plate printing
 3443 Plate work, fabricated: cutting, punching, bending, and shaping
 3462 Plate, armor: forged iron and steel—*mfp*
 3914 Plated ware: flatware, hollow ware, toilet ware, ecclesiastical ware, etc.
 2751 Plateless engraving
 3069 Platens, except printers': solid or covered rubber
 2754 Plates and cylinders, rotogravure printing: preparation of
 2753 Plates for printing, embossing of
 3579 Plates, addressing
 3353 Plates, aluminum
 3842 Plates, bone
 3351 Plates, copper and copper alloy
 3644 Plates, face (wiring devices)
 3312 Plates, galvanized iron and steel
 2795 Plates, lithographic: preparation of
 3312 Plates, made in steel works or rolling mills
 3555 Plates, metal: engravers'
 2654 Plates, paper: *mfp* except those made from pressed or molded pulp
 2793 Plates, photoengraving
 3861 Plates, photographic, sensitized
 3079 Plates, plastics
 2646 Plates, pressed and molded pulp: *mfp*
 3555 Plates, printers': of all materials
 3356 Plates: lead, magnesium, nickel, zinc, and their alloys
 3537 Platforms, cargo
 2899 Plating compounds
 3471 Plating of metals and formed products, for the trade
 3356 Platinum and platinum alloy sheets and tubing
 3497 Platinum and platinum base alloy foil
 3339 Platinum-group metals refining, primary
 3356 Platinum-group metals rolling, drawing and extruding
 3341 Platinum-group metals smelting and refining, secondary
 2511 Play pens, children's: wood
 2369 Play suits: girls', children's and infants'—*mfp*
 2339 Play suits: women's, misses', and juniors'
 3949 Playground equipment
 2752 Playing cards, lithographed
 2754 Playing cards: gravure printing
 2751 Playing cards: letterpress and screen printing
 2395 Pleating, for the trade
 3423 Pliers (hand tools)
 3843 Pliers, dental
 3271 Plinth blocks, precast terrazzo
 2643 Pliofilm bags, *mfp*
 2211 Plisse crepe, cotton
 2261 Plisse printing of cotton broad woven fabrics
 2262 Plisse printing of man-made fiber and silk broad woven fabrics
 3832 Plotting boards (sighting and fire control equipment)
 3811 Plotting instruments, drafting and map reading
 3524 Plows (garden tractor equipment)
 3523 Plows, agricultural: disc, moldboard, chisel, etc.
 3532 Plows, coal
 3531 Plows, earth: heavy duty
 3711 Plows, snow (motor vehicles)
 3499 Plugs, drain: magnetic
 3842 Plugs, ear and nose
 3643 Plugs, electric
 2499 Plugs, wood
 2032 Plum pudding
 3811 Plumb bobs
 3295 Plumbago: ground, refined, or blended
 3432 Plumbers' brass goods
 3423 Plumbers' hand tools
 3069 Plumbers' rubber goods
 3432 Plumbing fixture fittings and trim (brass goods)
 3079 Plumbing fixtures and parts, plastics
 3261 Plumbing fixtures, vitreous china
 3431 Plumbing fixtures: enameled iron, cast iron, and pressed metal
 3962 Plumes, feather
 2211 Plushes, cotton
 2221 Plushes, man-made fiber and silk
 2435 Plywood, hardwood or hardwood faced
 2436 Plywood, softwood
 3011 Pneumatic casings (rubber tires)
 3823 Pneumatic controllers, industrial process type
 3494 Pneumatic hose assemblies
 3041 Pneumatic hose: air brake, air line, etc.—rubber or rubberized fabric

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3822 Pneumatic relays, air-conditioning type
 3535 Pneumatic tube conveyor systems for general industrial use
 3421 Pocket knives
 3999 Pocketbook frames
 2396 Pocketbook linings
 3172 Pocketbooks, men's: regardless of material
 3171 Pocketbooks, women's: of all materials except precious metal
 2211 Pocketing twill, cotton
 2396 Pockets for men's, youths', and boys' suits and coats
 2371 Pointing furs
 3541 Pointing, chamfering, and burring machines
 3843 Points, abrasive: dental
 2879 Poison: ant, rat, roach, and rodent—household
 3944 Poker chips
 3832 Polariscope
 3832 Polarizers
 2411 Pole cutting contractors
 3644 Pole line hardware
 2491 Poles and pole crossarms, treated
 3272 Poles, concrete
 2591 Poles, curtain and drapery
 2491 Poles, cutting and preserving
 2411 Poles, wood: untreated
 2499 Poles: clothesline, tent, flag, etc.
 2499 Policemen's clubs, wood
 2352 Policemen's hats and caps, cloth
 2311 Policemen's uniforms
 2842 Polishes: furniture, automobile, metal, shoe, and stove
 3541 Polishing and buffing machines (machine tools)
 2842 Polishing and cleaning preparations
 2842 Polishing cloths, chemically treated
 2392 Polishing cloths, plain
 2291 Polishing felts, except woven
 3541 Polishing machines (machine tools)
 3471 Polishing of metals and formed products, for the trade
 2044 Polishing of rice
 3291 Polishing rouge (abrasive)
 3291 Polishing wheels
 2831 Pollen extracts
 3949 Polo equipment, except apparel
 2253 Polo shirts, *misc*
 2321 Polo shirts: men's youths', and boys'—*misc*
 2821 Polyacrylonitrile resins
 2821 Polyamide resins
 2822 Polybutadienes
 2821 Polycarbonate resins
 2221 Polyester broad woven fabrics
 2824 Polyester fibers
 2282 Polyester filament yarn: throwing, twisting, winding, or spooling
 2284 Polyester thread
 2281 Polyester yarn, made from purchased staple: spun
 2821 Polyesters
 2221 Polyethylene broad woven fabrics
 3079 Polyethylene film
 2821 Polyethylene resins
 2822 Polyethylenes, chlorosulfonated
 2821 Polyhexamethylenediamine adipamide resins
 2869 Polyhydric alcohol esters, amines, etc.
 2869 Polyhydric alcohols
 2822 Polyisobutylene (synthetic rubber)
 2822 Polyisobutylene-isoprene elastomers
 2821 Polyisobutylenes
 2821 Polymerization plastics, except fibers
 2822 Polymethylene rubbers
 2221 Polypropylene broad woven fabrics
 2282 Polypropylene filament yarn: throwing, twisting, winding, or spooling
 2821 Polypropylene resins
 2281 Polypropylene yarn, made from purchased staple: spun
 2821 Polystyrene resins
 2822 Polysulfides
 2851 Polyurethane coatings
 2821 Polyurethane resins
 2821 Polyvinyl alcohol resins
 2821 Polyvinyl chloride resins
 2824 Polyvinyl ester fibers
 3079 Polyvinyl film
 2821 Polyvinyl halide resins
 2821 Polyvinyl resins
 2824 Polyvinylidene chloride fibers
 2211 Pongee, cotton
 2221 Pongee, man-made fiber and silk
 3489 Pontiac guns
 3728 Pontoons, aircraft
 3732 Pontoons, except aircraft and inflatable (rubber and plastic)
 3079 Pontoons, nonrigid: plastics
 3069 Pontoons, rubber
 3949 Pool balls, pockets, tables, and equipment
 2065 Popcorn balls and other treated popcorn products, packaged
 3551 Popcorn machines, commercial type

STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|--|------|--|
| 3634 | Popcorn poppers, for home use: electric | 2819 | Potash alum |
| 2099 | Popcorn, packaged but not popped | 2812 | Potash, caustic |
| 2211 | Poplin, cotton | 2819 | Potassium aluminum sulfate |
| 2231 | Poplin, man-made fiber | 2819 | Potassium bichromate and chromate |
| 2891 | Porcelain cement, household | 2869 | Potassium bitartrate |
| 3469 | Porcelain enameled products: except plumbers' supplies | 2819 | Potassium bromide |
| 3264 | Porcelain parts, molded: for electrical devices | 2812 | Potassium carbonate |
| 3269 | Porcelain, chemical | 2819 | Potassium chlorate |
| 2431 | Porch columns, wood | 2819 | Potassium chloride and cyanide |
| 2591 | Porch shades, wood slat | 2819 | Potassium compounds, inorganic: except potassium hydroxide and carbonate |
| 2514 | Porch swings, metal | 2819 | Potassium cyanide |
| 2511 | Porch swings, wood | 2812 | Potassium hydroxide |
| 2431 | Porch work, wood | 2819 | Potassium hypochlorate |
| 2632 | Pork and beans, canned | 2819 | Potassium iodide |
| 2099 | Pork and beans, except canned | 2819 | Potassium metal |
| 2011 | Pork, <i>mitse</i> | 2819 | Potassium nitrate and sulfate |
| 2013 | Pork: pickled, cured, salted, or smoked— <i>mjpm</i> | 2819 | Potassium permanganate |
| 3448 | Portable buildings, prefabricated metal | 2099 | Potato chips |
| 2452 | Portable buildings, prefabricated wood | 3523 | Potato diggers, harvesters, and planters (agricultural machinery) |
| 3431 | Portable chemical toilets (metal) | 2034 | Potato flakes, granules and other dehydrated potato products |
| 3825 | Portable test meters | 3496 | Potato mashers, made from purchased wire |
| 2062 | Porter (alcoholic beverage) | 2499 | Potato mashers, wood |
| 3241 | Portland cement | 3551 | Potato peelers, electric |
| 3811 | Position indicators for landing gear, cowling flaps, stabilizers, etc. | 3421 | Potato peelers, hand |
| 3632 | Positioning controls, electric | 2046 | Potato starch |
| 3824 | Positive displacement meters | 3825 | Potentiometric instruments; except industrial process type |
| 2753 | Post cards, picture: engraved | 3823 | Potentiometric self-balancing instruments, except X-Y plotters |
| 2754 | Post cards, picture: gravure printing | 3255 | Pots, melting: glass house—clay |
| 2751 | Post cards, picture: letterpress and screen printing | 3443 | Pots: annealing, melting, and smelting |
| 2752 | Post cards, picture: lithographed | 2013 | Potted meats |
| 3423 | Post hole diggers, hand | 3559 | Pottery making machinery |
| 3444 | Post office collection boxes | 3269 | Pottery: art, garden, decorative, industrial, and laboratory |
| 3579 | Postage meters | 2875 | Potting soil, mixed |
| 3496 | Postal screen wire equipment: <i>mjpm</i> | 3172 | Pouches, tobacco: regardless of material |
| 2542 | Postal service lock boxes | 2834 | Poultry and animal remedies |
| 2621 | Poster paper, <i>mitse</i> | 3523 | Poultry brooders, feeders, and waterers |
| 2751 | Posters including billboard: letterpress and screen printing | 2048 | Poultry feeds |
| 2752 | Posters, lithographed | 3496 | Poultry netting, made from purchased wire |
| 2754 | Posters: gravure printing | 2016 | Poultry slaughtering, dressing, and packing for the wholesale trade |
| 3462 | Posts, bumping: railroad—forged (not made in rolling mills) | 3523 | Poultry vision control devices |
| 3272 | Posts, concrete | 2017 | Poultry, canned: <i>mjpm</i> |
| 3312 | Posts, fence: iron and steel—made in steel works or rolling mills | 2017 | Poultry, frozen: <i>mjpm</i> |
| 2411 | Posts, wood: hewn, round or split | 2016 | Poultry, frozen: <i>mitse</i> |
| 2491 | Posts, wood: treated | 3483 | Powder bag loading |
| 2026 | Pot cheese | | |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2399 Powder puffs and mitts
 3569 Powder testing chambers
 2892 Powder, blasting
 3399 Powder, metal: except artists' materials
 2844 Powder: baby, face, talcum, and toilet
 2892 Powder: pellet, smokeless, and sporting (explosive)
 2087 Powders, drink
 2834 Powders, pharmaceutical
 3443 Power boilers, industrial and marine
 3613 Power circuit breakers
 3613 Power connectors
 3629 Power conversion units, a.c. to d.c.: static—electric
 3531 Power cranes, draglines, and shovels
 3825 Power factor meters
 3613 Power fuse devices, 600 volts and over
 3621 Power generators
 3825 Power measuring equipment, electrical
 3679 Power supplies, static: regulated, unregulated, variable frequency
 3613 Power switchboards
 3613 Power switching equipment
 3612 Power transformers, electric
 3728 Power transmission equipment, aircraft
 3714 Power transmission equipment, motor vehicle
 3241 Pozzolan cement
 2389 Prayer shawls, *m/ym*
 3652 Pre-recorded magnetic tape
 3272 Prestressed concrete products
 3339 Precious metal refining, primary
 3341 Precious metal smelting and refining, secondary
 3443 Precipitators (process vessels), metal plate
 3564 Precipitators, electrostatic
 3545 Precision tools, machinists'
 3824 Predetermining counters
 3448 Prefabricated buildings, metal
 2452 Prefabricated buildings, wood
 2435 Prefinished hardwood plywood
 3999 Preparation of slides and exhibits, for classroom use
 2299 Preparing textile fibers for spinning (scouring and combing)
 2033 Preserves
 2491 Preserving of wood (creosoting)
 2261 Preshrinking cotton fabrics, for the trade
 2262 Preshrinking man-made fiber and silk broad woven fabrics, for the trade
 2231 Preshrinking wool broad woven fabrics, for the trade
 3542 Press brakes
 2211 Press cloth
 3462 Press forgings, iron and steel: not made in rolling mills
 2631 Pressboard, *mitse*
 2646 Pressed fiber products from wood pulp, *m/ym*
 2499 Pressed logs of sawdust and other wood particles, nonpetroleum binder
 3469 Pressed metal products (stampings)
 2291 Pressed wool felts
 3523 Presses and balers: hay, cotton, etc.
 3542 Presses, arbor
 3582 Presses, finishing: commercial laundry and dry cleaning
 3569 Presses, metal baling
 3555 Presses, printing
 3579 Presses, seal
 3551 Presses: cheese, beet, cider, and sugar cane
 3542 Presses: forming, stamping, punching, and sizing (machine tools)
 3542 Presses: hydraulic and pneumatic, mechanical and manual
 2499 Pressing blocks, tailors': wood
 3582 Pressing machines, commercial laundry and dry cleaning
 3829 Pressure and vacuum indicators, aircraft engine
 3822 Pressure controllers, air-conditioning system type
 3361 Pressure cookers, domestic: cast aluminum
 3469 Pressure cookers, stamped or drawn
 3589 Pressure cookers, steam: commercial
 3823 Pressure gauges, dial and digital
 3823 Pressure instruments, industrial process type
 3321 Pressure pipe, cast iron
 3272 Pressure pipe, reinforced concrete
 3494 Pressure regulators, metal
 3829 Pressure transducers
 3443 Pressure vessels, industrial: metal plate—made in boiler shops
 3443 Pressurizers and auxiliary equipment, nuclear: metal plate
 2052 Pretzels
 3692 Primary batteries, dry and wet
 3823 Primary elements for process flow measurement: orifice plates, etc.
 3822 Primary oil burner controls, including stack controls and cadmium cells
 3334 Primary production of aluminum

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STANDARD INDUSTRIAL CLASSIFICATION

- 3339 Primary refining of nonferrous metal:
except copper, lead, zinc, aluminum
 3331 Primary smelting and refining of copper
 3332 Primary smelting and refining of lead
 3333 Primary smelting and refining of zinc
 3339 Primary smelting of nonferrous metal:
except copper, lead, zinc, aluminum
 3351 Primer cups, copper and copper alloy
 3483 Primers for ammunition, over 30 mm. (or
over 1.18 inch)
 2851 Primers, paint
 2211 Print cloths, cotton
 3679 Printed circuits
 3573 Printers, including strip (computer pe-
ripheral equipment)
 3555 Printers' machines and equipment
 3555 Printers' plates, of all materials
 2396 Printing and embossing on plastics fabric
articles
 2261 Printing and finishing of cotton broad
woven fabrics
 2731 Printing and publishing, books and
pamphlets
 3953 Printing dies, rubber
 3861 Printing equipment, photographic
 3999 Printing eyeglass frames for the trade
 3861 Printing frames, photographic
 2753 Printing from engraved and etched plates
 2752 Printing from lithographic plates
 2893 Printing ink
 3552 Printing machinery, textile
 2262 Printing man-made fiber and silk broad
woven fabrics
 2269 Printing narrow fabrics, except knit and
wool
 2396 Printing on fabric articles
 2732 Printing only, books and pamphlets
 2631 Printing paper
 2754 Printing plates, and cylinders rotogra-
vure: preparation of
 3555 Printing presses
 2754 Printing, commercial or job: gravure
 2751 Printing, commercial or job: letterpress
and screen
 2752 Printing, commercial or job: lithographic
 2752 Printing, offset
 2752 Printing, photo-offset
 2754 Printing: gravure, photogravure, rotary
photogravure, and rotogravure
 2751 Printing: letterpress, screen and flexo-
graphic
 3832 Prisms, optical
 3693 Probe, electric, medical
 3841 Probes, surgical
 2833 Procaine and derivatives: bulk, uncom-
pounded
 2834 Procaine pharmaceutical preparations
 3823 Process control instruments, industrial
 3494 Process control regulator valves
 3443 Process vessels, industrial: metal plate—
made in boiler shops
 2099 Processed butter
 2022 Processed cheese
 3861 Processing equipment, photographic
 2294 Processing of textile mill waste and re-
covering fibers
 3569 Producers, gas (machinery)
 3824 Production counters
 2325 Professional service apparel, washable:
men's
 3823 Programmers, process type
 3483 Projectile forgings, machined: for ammu-
nition over 30 mm.
 3483 Projectiles, chemical warfare
 3483 Projectiles, jet propulsion: complete
 3832 Projection lenses
 3861 Projectors, microfilm
 3861 Projectors, still and motion picture: si-
lent and sound
 3489 Projectors: antisub, depth charge re-
lease, grenade, livena, and rocket
 3253 Promenade tile, clay
 2819 Propellants for missiles, solid: inorganic
 2869 Propellants for missiles, solids: organic
 3728 Propeller adapter assemblies, hydromatic
 3728 Propeller aligning tables
 3634 Propeller fans, window-type (household)
 3549 Propeller straightening presses
 3824 Propeller type meters with registers
 3362 Propellers, ship and screw: cast brass,
bronze, copper and copper base
 3728 Propellers, variable and fixed pitch: and
parts—aircraft
 3519 Propelling units, outboard
 2834 Proprietary drug products
 3764 Propulsion units for guided missiles and
space vehicles
 2869 Propylene
 2869 Propylene glycol
 3842 Prosthetic appliances and supplies
 3579 Protectors, check (machines)
 3851 Protectors, eye
 3949 Protectors: baseball, basketball, hockey,
etc.
 2824 Protein fibers
 2821 Protein plastics

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2034 Prunes, dried
 3423 Pruning tools
 2816 Prussian blue pigments
 3423 Prying bars (hand tools)
 3651 Public address systems
 2531 Public building furniture
 3648 Public lighting fixtures
 2741 Publishing and printing maps, guides, directories, atlases, and music
 2731 Publishing and printing, books and pamphlets
 2711 Publishing and printing, or publishing only: newspapers
 2721 Publishing and printing, or publishing only: periodicals
 2731 Publishing only, books and pamphlets
 2741 Publishing without printing: maps, guides, directories, atlases, and music
 2032 Puddings, fig and plum—canned
 2013 Puddings, meat: *m/ypm*
 3423 Pullers: wheel, gear, and bearing (hand tools)
 3429 Pulleys, metal: except power transmission equipment
 3568 Pulleys, power transmission
 2499 Pulleys, wood
 2865 Pulp colors, organic
 3554 Pulp mill machinery
 2611 Pulp mills
 2646 Pulp products, pressed and molded, except statuary: *m/ypm*
 2611 Pulp, fiber: made of wood, rags, waste paper, linters, straw, and bagasse
 2611 Pulp: soda, sulfate, sulfite, groundwood, rayon, and semichemical
 3281 Pulpits, cut stone
 2531 Pulpits, except stone
 2411 Pulpwood camps
 2411 Pulpwood contractors engaged in cutting, not operating pulp mills
 3825 Pulse (signal) generators
 3829 Pulse analyzers, nuclear monitoring
 3679 Pulse forming networks
 3662 Pulsed electron guns
 3295 Pulverized earth
 3523 Pulverizers, soil (agricultural machinery)
 3531 Pulverizers, stone: portable
 3532 Pulverizers, stone: stationary
 3291 Pumice and pumicite abrasives
 3295 Pumice, ground or otherwise treated
 3599 Pump governors, for gas machines
 3561 Pump jacks and other pumping equipment
 3069 Pump sleeves, rubber
 3144 Pumps (shoes)
 3724 Pumps, aircraft engine
 3561 Pumps, except gasoline and oil measuring and dispensing pumps
 3561 Pumps, for fluid power systems
 3561 Pumps, hydraulic
 3714 Pumps, hydraulic fluid power: for automotive steering mechanisms
 3586 Pumps, measuring and dispensing: gasoline and oil
 3728 Pumps, propeller feathering
 3811 Pumps, vacuum: laboratory
 3573 Punched card readers, sorters and tabulators
 2291 Punched felts
 3423 Punches (hand tools)
 3544 Punches, forming and stamping
 3579 Punches, paper: hand
 3542 Punching and shearing machines
 3573 Punching machines, card
 3999 Puppets
 **** Purchasing offices of manufacturing concerns—code as auxiliaries
 2033 Purees, fruit and vegetable
 3569 Purifiers, centrifugal
 3446 Purlins, light gage steel
 3172 Purses, men's: regardless of material
 3171 Purses, women's: of all materials except precious metal
 3991 Push brooms
 3799 Pushcarts
 3545 Pushers
 3199 Puttees, canvas and leather
 2851 Putty
 3423 Putty knives
 2879 Pyrethrin bearing preparations
 2879 Pyrethrin concentrates
 2822 Pyridene-butadiene copolymers
 2822 Pyridine-butadiene rubbers
 3952 Pyrography materials
 2861 Pyroligneous acid
 3297 Pyrolytic graphite
 3269 Pyrometer tubes
 3823 Pyrometers, industrial process type
 3269 Pyrometric cones: earthenware
 3295 Pyrophyllite, ground or otherwise treated
 2899 Pyrotechnic ammunition: flares, signals, flashlight bombs, and rockets
 3484 Pyrotechnic pistols and projectors
 2821 Pyroxylin
 2295 Pyroxylin coated fabrics

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STANDARD INDUSTRIAL CLASSIFICATION

Q

- 3253 Quarry tile, clay
- 3181 Quarters (shoe cut stock)
- 3679 Quartz crystals, for electronic application
- 2861 Quebracho extract
- 2861 Quercitron extract
- 3274 Quicklime
- 2293 Quilt filling: curled hair, cotton waste, moss, hemp tow, kapok, etc.
- 2395 Quilted fabrics or cloth
- 2395 Quilting, for the trade
- 2221 Quilts, man-made fibers and silk: *mitas*
- 2392 Quilts, *m/psm*
- 2833 Quinine and derivatives
- 2865 Quinoline dyes
- 2869 Quinuclidinol ester and benzylic acid

R

- 2016 Rabbits: slaughtering, dressing, and packing for the wholesale trade
- 2741 Race track programs: publishing and printing, or publishing only
- 3562 Races, ball and roller bearing
- 3644 Raceways
- 3949 Rackets and frames: tennis, badminton, squash, lacrosse, etc.
- 2511 Racks, book and magazine: wood
- 2499 Racks, for drying clothes: wood
- 2542 Racks, merchandise display and storage: metal
- 2541 Racks, merchandise display: wood
- 3443 Racks, trash: metal plate
- 2542 Racks: mail pouch, mailing, mail sorting, etc. (metal)
- 3662 Radar equipment
- 3825 Radar testing instruments, electric
- 3731 Radar towers, floating
- 3829 Radiac equipment (radiation measuring and detecting)
- 3567 Radiant heating systems, "Industrial process": dryers, cookers, etc.
- 3829 Radiation measuring and detecting (radiac) equipment
- 3842 Radiation shielding aprons, gloves, sheeting, etc.
- 3444 Radiator shields and enclosures, sheet metal
- 3714 Radiators and radiator shells and cores, motor vehicle

- 3634 Radiators, electric
- 3433 Radiators, except electric
- 3519 Radiators, stationary engine
- 3651 Radio and phonograph combinations
- 3469 Radio and television chassis, stamped
- 3441 Radio and television towers
- 3662 Radio and television switching equipment
- 3662 Radio antennas (transmitting and receiving) and ground equipment
- 3825 Radio apparatus analyzers, for testing electrical characteristics
- 2517 Radio cabinets and cases, wood
- 2519 Radio cabinets, plastic
- 3662 Radio compasses
- 3825 Radio frequency measuring equipment
- 3825 Radio frequency oscillators
- 3811 Radio magnetic instrumentation (RMI)
- 3662 Radio receiver networks
- 3651 Radio receiving sets
- 3671 Radio receiving type electron tubes, except cathode ray
- 3825 Radio set analyzers, electrical
- 3662 Radio telephone and telegraph equipment, except tubes
- 3662 Radio transmitting apparatus, except tubes
- 3825 Radio tube checkers, electrical
- 2819 Radioactive isotopes
- 3693 Radiographic X-ray apparatus and tubes: medical, industrial, and research
- 2819 Radium chloride
- 3693 Radium equipment
- 2819 Radium luminous compounds
- 3079 Rafts, life: nonrigid—plastics
- 3069 Rafts, life: rubber
- 2279 Rag rugs
- 2294 Rags, carbonized
- 3643 Rail bonds, electric: for propulsion and signal circuits
- 3312 Rail joints and fastenings, made in steel works or rolling mills
- 3531 Rail laying and tamping equipment
- 3446 Railings, bannisters, guards, etc.: made from pipe
- 3446 Railings, prefabricated metal
- 3446 Railings, stair: prefabricated metal
- 2431 Railings, stair: wood
- 3321 Railroad brake shoes, cast iron
- 3462 Railroad bumping posts, forged: not made in rolling mills

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3321 Railroad car wheels, chilled cast iron
 3743 Railroad cars and car equipment
 2491 Railroad cross bridge and switch ties, treated
 3312 Railroad crossings, iron and steel: made in steel works or rolling mills
 3493 Railroad equipment springs
 2899 Railroad fuses
 3429 Railroad hardware
 3568 Railroad journal car bearings
 3743 Railroad locomotives and parts, electric or nonelectric
 3999 Railroad models, except toy and hobby models
 3944 Railroad models: toy and hobby
 2531 Railroad seats
 3662 Railroad signaling devices, electric
 2411 Railroad ties, hewn
 2421 Railroad ties, sawed
 2899 Railroad torpedoes
 3576 Railroad track scales
 3462 Railroad wheels, axles, frogs, and other equipment: forged—*m/ps*
 3355 Rails, aluminum: rolled and drawn
 2411 Rails, fence: round or split
 3312 Rails, iron and steel
 3312 Rails, rerolled or renewed
 3351 Rails, rolled and drawn: brass, bronze, and copper
 3441 Railway bridge sections, prefabricated
 3743 Railway maintenance cars
 3743 Railway motor cars
 3621 Railway motors and control equipment, electric
 3531 Railway track equipment: rail layers, ballast distributors, etc.
 2385 Raincoats, except vulcanized rubber—*m/ps*
 2034 Raisins
 3423 Rakes (hand tools)
 3523 Rakes, hay (agricultural machinery)
 3531 Rakes, land clearing: mechanical
 2299 Ramie yarn, thread, roving, and textiles
 3297 Ramming mixes, nonclay
 3448 Ramps, prefabricated: metal
 3131 Rands (shoe cut stock)
 3433 Range boilers, galvanized iron and non-ferrous metal
 3861 Range finders, photographic
 3494 Range valves, metal
 3589 Ranges, cooking: commercial
 3631 Ranges, cooking: household
 3631 Ranges: electric, gas, etc.—household
 3743 Rapid transit cars and equipment
 2819 Rare earth metal salts
 3423 Rasps, including recutting and resharp-ening
 2879 Rat poisons
 3811 Rate-of-climb instrumentation
 2211 Ratine, cotton
 3612 Ratio transformers
 2519 Rattan furniture, padded or plain
 2499 Rattan ware, except furniture
 2032 Ravioli, canned
 2231 Raw stock dyeing and finishing of wool, mohair, and similar fibers
 2269 Raw stock dyeing and other finishing, except wool
 3111 Rawhide
 2221 Rayon broad woven fabrics
 2241 Rayon narrow fabrics
 2823 Rayon primary products: fibers, straw, strips, and yarn
 2611 Rayon pulp
 2234 Rayon thread
 2299 Rayon tops, combing and converting
 2282 Rayon yarn, made from purchased filament yarn: throwing, twisting, winding
 2281 Rayon yarn, made from purchased staple: spun
 2823 Rayon yarn, made in chemical plants (primary products)
 3316 Razor blade strip steel, cold rolled: not made in hot rolling mills
 3421 Razor blades
 3199 Razor strops
 3634 Razors, electric
 3421 Razors: safety, straight
 2892 RDX (explosive)
 2842 Re-refining dry-cleaning fluid
 2992 Re-refining lubricating oils
 3443 Reactor containment vessels, metal plate
 3612 Reactors, current limiting
 3443 Reactors, nuclear: military and industrial
 3361 Readers, microfilm
 2751 Ready prints
 3273 Ready-mixed concrete, production and distribution
 2819 Reagent grade chemicals, inorganic: re-fined from technical grades
 2869 Reagent grade chemicals, organic: re-fined from technical grades
 3545 Reamers, machine tool
 3541 Reaming machines

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STANDARD INDUSTRIAL CLASSIFICATION

- 3714 Rear axle housings, motor vehicle
 3789 Rebinding books, magazines, or pamphlets
 3714 Rebuilding motor vehicle engines and transmissions, on a factory basis
 **** Rebuilding except tires or electric motors—code same as new
 3541 Rebuilt machine tools, metal cutting types
 3542 Rebuilt machine tools, metal forming types
 **** Rebuilt tires—see nonmanufacturing
 2782 Receipt books
 3662 Receiver-transmitter units (transceiver)
 3651 Receiving sets, radio and television
 3471 Rechroming auto bumpers for the trade
 3031 Reclaimed rubber (reworked by manufacturing processes)
 3399 Reclaiming ferrous metals from clay
 3489 Recoil mechanisms for guns over 30 mm. (or over 1.18 inch)
 3484 Recoil mechanisms for guns, 30 mm. (or 1.18 inch) and below
 3489 Recolless rifles
 3711 Reconnaissance cars
 2782 Record albums
 3652 Record blanks, phonograph
 3651 Recorders, home: cassette, cartridge, and reel
 3825 Recorders, oscillographic
 3573 Recorders, tape: for data computers
 3559 Recorders, watch rate
 3679 Recording and playback heads, magnetic
 3679 Recording heads, for speech and musical equipment
 3651 Recording machines, music and speech: except office and industrial
 3652 Recording studios
 3652 Records, phonograph
 3341 Recovering and refining of nonferrous metals
 2294 Recovering textile fibers from clippings and rags
 3399 Recovery of iron ore from open hearth slag
 3341 Recovery of silver from used photographic film
 3612 Rectifier transformers
 3629 Rectifiers (electrical apparatus)
 3679 Rectifiers, electronic: except solid state
 3674 Rectifiers, solid state
 2316 Red lead pigment
 2399 Red oil (oleic acid)
 2141 Redrying and stemming of tobacco
 3494 Reducer returns, pipe
 3494 Reducing valves (steam fittings)
 3566 Reduction gears and gear units for turbines, except auto and aircraft
 2519 Reed furniture, padded or plain
 2499 Reed ware, except furniture
 3931 Reedboards, organ
 3931 Reeds for musical instruments
 3552 Reeds, loom
 3931 Reeds, organ
 3569 Reels and racks, fire hose
 3499 Reels, cable: metal
 2499 Reels, cloth winding: wood
 3861 Reels, film
 3949 Reels, fishing
 2499 Reels, for drying clothes: wood
 2499 Reels, plywood
 2655 Reels, textile: fiber—*m/ps*
 2062 Refineries, cane sugar
 2911 Refineries, petroleum
 2062 Refiners' blackstrap molasses
 2062 Refiners' sirup, cane
 2911 Refinery gas, produced in petroleum refineries
 3332 Refining of lead, primary
 3339 Refining of nonferrous metal, primary: except copper, lead, zinc, aluminum
 3341 Refining of nonferrous metals and alloys, secondary
 3333 Refining of zinc, primary
 2231 Refinishing and sponging cloths of wool, mohair, etc., for the trade
 2261 Refinishing and sponging cotton broad woven fabrics, for the trade
 3825 Reflectometers, sliding shorts
 3231 Reflector glass beads, for highway signs and other reflectors: *m/ps*
 3229 Reflectors for lighting equipment, glass: pressed or blown
 3647 Reflectors, clearance: motor vehicle
 3648 Reflectors, for lighting equipment: metal
 3832 Reflectors, optical
 3832 Reflectors, searchlight
 3832 Reflectoscopes
 3832 Refractometers, except industrial process type
 3823 Refractometers, industrial process type
 3297 Refractories, castable: nonclay

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3297 Refractories, graphite: carbon bond or ceramic bond
 3297 Refractories, nonclay
 3255 Refractory cement and mortars, clay
 3297 Refractory cement, nonclay
 3822 Refrigeration controls (pressure)
 3585 Refrigeration machinery and equipment, industrial
 3822 Refrigeration thermostats
 3822 Refrigeration/air conditioning defrost controls
 3632 Refrigerator cabinets, household: metal and wood
 3229 Refrigerator dishes and jars, glass
 3469 Refrigerator parts, porcelain enameled
 3632 Refrigerators, mechanical and absorption: household
 3728 Refueling equipment, airplane: for use in flight
 2389 Regalia, *mfp*
 3079 Regenerated cellulose, except fiber
 2823 Regenerated cellulose fibers
 3579 Registers, autographic
 3574 Registers, credit account
 3829 Registers, fare: for street cars, buses, etc.
 3446 Registers, hot air
 3824 Registers, linear tallying
 3541 Regrinding machines, crankshaft
 3494 Regulator valves for process control
 3494 Regulators (steam fittings)
 3612 Regulators, feeder voltage (electric transformers)
 3613 Regulators, power
 3612 Regulators, transmission and distribution voltage
 3496 Reinforcing mesh, concrete: made from purchased wire
 3613 Relays, electric power
 3679 Relays, for electronic use
 3825 Relays, instrument: all types
 2035 Relishes, fruit and vegetable
 2834 Remedies, human and animal
 2077 Rendering plants, grease and tallow
 3962 Renovating feathers, for the trade
 2211 Rep, cotton
 2789 Repairing books (bookbinding)
 3661 Repeater equipment, telephone and telegraph
 2421 Resawing lumber into smaller dimensions
 3764 Research and development of guided missile and space vehicle engines
 3769 Research and development of guided missile and space vehicle components
 3761 Research and development of guided missiles and space vehicles
 2833 Reserpines
 2295 Resin (plastic) coated fabrics
 2851 Resinate driers
 2821 Resins, phenolic
 2821 Resins, synthetic: coal tar and non-coal tar
 3825 Resistance measuring equipment
 3823 Resistance thermometers and bulbs, industrial process type
 3622 Resistance welder controls
 3623 Resistance welders, electric
 3622 Resistors and resistor units, except for electronic end products
 3676 Resistors, for electronic end products
 3621 Resolvers
 3679 Resonant reed devices, electronic
 2865 Resorcinol
 3842 Respirators
 3842 Respiratory protection equipment, personal
 2599 Restaurant furniture, wood or metal
 3444 Restaurant sheet metal work
 3842 Restraints, patient
 3479 Retinning of cans and utensils, not done in rolling mills
 3841 Retinoscopes
 3297 Retorts, graphite
 3443 Retorts, industrial
 3443 Retorts, smelting
 3841 Retractors
 **** Retreaded tires—see nonmanufacturing
 3011 Retreading materials, tire
 3484 Revolvers and parts
 2282 Rewinding of yarn, except wool
 3861 Rewinds, motion picture film
 3662 RF power amplifiers, and IF amplifiers: sold separately
 3339 Rhenium refining, primary
 3622 Rheostats, except for electronic end products
 3679 Rheostats, for electronic end products
 2655 Ribbon blocks, fiber: *mfp*
 2297 Ribbon, nonwoven (yarn bonded by plastic)
 2396 Ribbons and bows, cut and sewed
 3955 Ribbons, inked: typewriter, adding machine, cash register, etc.
 2241 Ribbons, *mitse*

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STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|---|------|--|
| 2044 | Rice bran, flour, and meal | 3582 | Rock drills, portable |
| 2043 | Rice breakfast foods | 3275 | Rock, gypsum |
| 2044 | Rice cleaning and polishing | 2512 | Rockers, upholstered on wood frames |
| 2044 | Rice polish | 2511 | Rockers, wood: except upholstered |
| 2046 | Rice starch | 3443 | Rocket casings |
| 2044 | Rice, brewers' | 2369 | Rocket engine fuel, organic |
| 2044 | Rice, brown | 3724 | Rocket motors, aircraft |
| 2044 | Rice, vitamin and mineral enriched | 3764 | Rocket motors, guided missiles |
| 2241 | Rickrack braid | 3489 | Rocket projectors |
| 3599 | Riddles, sand (hand sifting or screening apparatus) | 3483 | Rockets (ammunition) |
| 2329 | Riding clothes: men's, youths', and boys' | 3761 | Rockets (guided missiles), space and military: complete |
| 3199 | Riding crops | 3483 | Rockets, bazooka |
| 2339 | Riding habits: women's, misses', and juniors' | 2899 | Rockets, pyrotechnic |
| 2899 | Rifle bore cleaning compounds | 3944 | Rocking horses |
| 3541 | Rifle working machines (machine tools) | 3269 | Rockingham earthenware |
| 3484 | Rifles and parts, 80 mm. (or 1.18 inch) and below | 3547 | Rod mills (rolling mill equipment) |
| 3841 | Rifles for propelling hypodermics into animals | 2879 | Rodent poisons |
| 3484 | Rifles, high compression pneumatic: 80 mm. (or 1.18 inch) and below | 2879 | Rodenticides |
| 3489 | Rifles, recoilless | 3949 | Rods and rod parts, fishing |
| 3469 | Rigidizing metal | 3354 | Rods, aluminum: extruded |
| 3714 | Rims, wheel: motor vehicle | 3355 | Rods, aluminum: rolled |
| 3961 | Rings, finger: gold plated wire | 3351 | Rods, copper and copper alloy |
| 3255 | Rings, glass house: clay | 2591 | Rods, curtain and drapery |
| 3592 | Rings, piston | 3496 | Rods, gas welding: made from purchased wire |
| 3911 | Rings, precious metal | 3069 | Rods, hard rubber |
| 3546 | Riveting hammers | 3312 | Rods, iron and steel: made in steel works or rolling mills |
| 3542 | Riveting machines | 3079 | Rods, plastics |
| 3452 | Rivets | 3811 | Rods, surveyors' |
| 2879 | Roach poisons | 3356 | Rods: lead, magnesium, nickel, tin, titanium, and their alloys |
| 3531 | Road construction and maintenance machinery | 3832 | Roll correctors |
| 2951 | Road materials, bituminous: not made in petroleum refineries | 3562 | Roller bearings and parts |
| 2911 | Road materials, bituminous: produced in petroleum refineries | 3111 | Roller leather |
| 3711 | Road oilers (motor vehicles) | 3547 | Roller levelers (rolling mill machinery) |
| 2911 | Road oils, produced in petroleum refineries | 2261 | Roller printing of cotton broad woven fabrics |
| 2013 | Roast beef | 2262 | Roller printing of man-made fiber and silk broad woven fabrics |
| 3634 | Roasters, electric | 3949 | Roller skates |
| 3551 | Roasting machinery: coffee, peanut, etc. | 2591 | Rollers and fittings, window shade |
| 2384 | Robes, lounging: except knit—other than children's | 3523 | Rollers and levelers, land (agricultural equipment) |
| 2369 | Robes, lounging: except knit, children's— <i>mpjm</i> | 3991 | Rollers, paint |
| 2253 | Robes, lounging: <i>mitse</i> | 3555 | Rollers, printers' |
| 3531 | Rock crushing machinery, portable | 3531 | Rollers, road: steam or other power |
| 3532 | Rock crushing machinery, stationary | 3531 | Rollers, sheepfoot and vibratory |
| | | 2499 | Rollers, wood |
| | | 3442 | Rolling doors for industrial buildings and warehouses, metal |
| | | 3542 | Rolling machines, thread and spline |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3547 Rolling mill machinery and equipment
 3321 Rolling mill rolls, iron: not machined
 3325 Rolling mill rolls, steel: not machined
 2499 Rolling pins, wood
 3351 Rolling, drawing, and extruding of copper and copper alloys
 3356 Rolling, drawing, and extruding of other nonferrous metals
 2051 Rolls (bakery products)
 3069 Rolls, except printers': solid or covered rubber
 2649 Rolls, paper: adding machine, telegraph tape, etc.—*mfp*
 3321 Rolls, rolling mill: iron—not machined
 3325 Rolls, rolling mill: steel—not machined
 2211 Romaines
 2369 Rompers, infants': *mfp*
 3841 Rongeurs, bone
 2952 Roof cement: asphalt, fibrous, and plastic
 2952 Roof coatings and cements: fibrous and nonfibrous, liquid and plastic
 3444 Roof deck, sheet metal
 2439 Roof trusses, wood
 2661 Roofing board and felt stock, unsaturated: *mitse*
 2952 Roofing felts, cements, and coatings: asphalt, tar, and composition
 3295 Roofing granules
 2952 Roofing pitch, coal tar: not made in by-product coke ovens
 3272 Roofing tile and slabs, concrete
 3259 Roofing tile, clay
 3292 Roofing, asbestos felt roll
 2952 Roofing, asphalt or tar saturated felt: built-up, roll, and shingle
 3444 Roofing, sheet metal
 3281 Roofing, slate
 2661 Roofing, wood fiber: *mitse*
 3585 Room coolers, portable
 3433 Room heaters, except electric
 3634 Room heaters, space: electric
 3822 Room thermostats
 2086 Root beer, bottled or canned
 2046 Root starch, edible
 3552 Rope and cordage machines
 2621 Rope and jute wrapping paper, *mitse*
 3429 Rope fittings
 3292 Rope, asbestos
 2298 Rope, except asbestos and wire
 3496 Rope, uninsulated wire: made from purchased wire
 3961 Rosaries and other small religious articles, except precious metal
 3911 Rosaries and other small religious articles, precious metal
 2821 Rosin modified resins
 2899 Rosin sizes
 2861 Rosin, produced by distillation of pine gum or pine wood
 3621 Rotary converters (electrical equipment)
 3523 Rotary hoes (agricultural machinery)
 2754 Rotary photogravure printing
 3549 Rotary slitters (metalworking machines)
 3545 Rotary tables
 3824 Rotary type meters, consumption registering
 3351 Rotating bands, copper and copper alloy
 2879 Rotenone bearing preparations
 2879 Rotenone concentrates
 3728 Roto-blades for helicopters
 2621 Rotogravure paper
 2754 Rotogravure printing
 2754 Rotogravure printing plates and cylinders
 3621 Rotor retainers and housings
 3621 Rotors, for motors
 3524 Rototillers (garden machinery)
 2844 Rouge, cosmetic
 3291 Rouge, polishing
 3523 Roughage mills (agricultural machinery)
 2449 Round stave baskets, for fruits and vegetables
 2426 Rounds or rungs, ladder and furniture: hardwood
 3312 Rounds, tube
 3553 Routing machines, woodworking
 2299 Roves, flax and jute
 3552 Roving machines (textile machinery)
 3732 Rowboats, building and repairing
 3069 Rubber bands
 2891 Rubber cement
 3069 Rubber covered motor mounting rings (rubber bonded)
 3567 Rubber curing ovens
 3069 Rubber heels, soles, and soling strips
 2869 Rubber processing chemicals, organic: accelerators and antioxidants
 3559 Rubber products machinery
 2891 Rubber sealing compounds, synthetic
 2241 Rubber thread and yarns, fabric covered
 3559 Rubber working machinery
 3031 Rubber, reclaimed and reworked by manufacturing processes
 2822 Rubber, synthetic
 3069 Rubberized fabrics
 3069 Rubbers, chlorinated: natural

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STANDARD INDUSTRIAL CLASSIFICATION

- 2822 Rubbers, chlorinated: synthetic
 3291 Rubbing stones, artificial
 2819 Rubidium metal
 3569 Rudder actuating hydromotors
 3728 Rudders, aircraft
 2395 Ruffling, for the trade
 2339 Ruffings, women's
 2069 Rug backing compounds, latex
 3582 Rug cleaning, drying, and napping machines: commercial laundry
 2283 Rug yarn: wool, mohair, or similar animal fiber
 2842 Rug, upholstery, and dry cleaning detergents and spotters
 2299 Rugbacking, jute or other fiber: except felt
 2279 Rugs, braided and hooked
 2271 Rugs, machine woven
 2272 Rugs, tufted
 2279 Rugs: twisted paper, grass, reed, coir, sisal, jute and rag
 3433 Rules and rulers, metal
 2499 Rules and rulers, wood
 3555 Rules, printers'
 3811 Rules, slide
 2782 Ruling of paper
 2085 Rum
 2052 Rusk, machine-made
 2035 Russian dressing
 2992 Rust arresting compounds, animal and vegetable oil base
 3479 Rust proofing (hot dipping) of metals and formed products, for the trade
 2842 Rust removers
 2999 Rust resisting compounds
 2041 Rye flour
- S**
- 2822 S-type rubber
 2869 Saccharin
 2844 Sachet
 2643 Sacks, including multiwall or heavy duty shipping sacks: *mfp*
 2399 Saddle cloths
 2842 Saddle soap
 2499 Saddle trees, wood
 3429 Saddlery hardware
 3111 Saddlery leather
 3199 Saddles and parts
 3751 Saddles, motorcycle and bicycle
 3499 Safe deposit boxes and chests, iron and steel
 3499 Safe doors and linings, iron and steel
 3499 Safes, iron and steel
- 3842 Safety appliances and equipment, personal
 3199 Safety belts, leather
 2892 Safety fuses
 3331 Safety glass, made from purchased glass
 3842 Safety gloves, all materials
 3984 Safety pins
 3421 Safety razor blades
 3421 Safety razors
 2899 Safety strap assemblies, automobile: except leather
 2076 Safflower oil
 3255 Saggars
 2211 Sail cloth, *misc*
 3732 Sailboats, building and repairing
 3731 Sailing vessels, commercial: building and repairing
 2394 Sails, *mfp*
 2812 Sal soda
 2035 Salad dressings, raw and cooked
 2079 Salad oils, vegetable: except corn oil—refined
 3433 Salamanders, coke and gas burning
 2761 Sales books
 2833 Salicylic acid derivatives, medicinal grade
 3829 Salinity indicators, except industrial process type
 2091 Salmon: smoked, salted, dried, canned and pickled
 2899 Salt
 2819 Salt cake (sodium sulfate)
 2052 Saltines
 2819 Salts of rare earth metals
 2834 Salts, effervescent
 2899 Salts, heat treating
 2782 Sample books
 3161 Sample cases, regardless of material
 3829 Sample changers, nuclear radiation
 3471 Sand blasting of metal parts
 3531 Sand mixers
 3599 Sand riddles (hand sifting or screening apparatus)
 3149 Sandals, children's: except rubber
 3143 Sandals, men's: except rubber
 3021 Sandals, rubber
 3144 Sandals, women's: except rubber
 3714 Sanders, motor vehicle safety
 3553 Sanding machines, except portable floor sanders (woodworking machinery)
 3589 Sanding machines, floor: portable
 3291 Sandpaper
 3554 Sandpaper manufacturing machines

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2022 Sandwich spreads, cheese
 2013 Sandwich spreads, meat: *m/psm*
 2035 Sandwich spreads, salad dressing base
 3634 Sandwich toasters and grills, household: electric
 2099 Sandwiches, assembled and packaged: for wholesale market
 3842 Sanitary aprons
 2647 Sanitary napkins, *m/psm*
 2654 Sanitary paper food containers, liquid tight: *m/psm*
 3432 Sanitary pipe fittings (brass goods)
 3431 Sanitary ware: bathtubs, lavatories, and sinks—metal
 2842 Sanitation preparations
 2221 Saran broad woven fabrics
 2824 Saran fibers
 2282 Saran filament yarn: throwing, twisting, winding, or spooling
 2281 Saran yarn, made from purchased staple: spun
 2077 Sardine oil
 2091 Sardines, canned
 3321 Sash balances, cast iron
 3369 Sash balances, lead
 3495 Sash balances, spring
 3442 Sash, door and window: metal and metal covered
 2431 Sash, door and window: wood
 3161 Satchels, regardless of material
 2211 Sateens, cotton
 3662 Satellites
 2816 Satin white pigment
 2221 Satins
 3612 Saturable reactors
 2661 Saturated felts, *mitse*
 3079 Saucers, plastics
 2035 Sauces, meat (seasoning): except catsup
 2035 Sauces, vegetable: except tomato
 2035 Sauerkraut, bulk
 2033 Sauerkraut, canned
 3634 Sauna heaters, electric
 2452 Sauna rooms, prefabricated: wood
 2013 Sausage casings, natural
 3079 Sausage casings, synthetic
 3551 Sausage stuffers
 2013 Sausages, *m/psm*
 2011 Sausages, *mitse*
 3425 Saw blades, for hand or power saws
 2411 Saw logs
 2421 Sawdust and shavings
 2499 Sawdust, reground
 3541 Sawing and cutoff machines (metal working machinery)
 3553 Sawmill machines
 2421 Sawmills combined with logging camps or planing mills
 2421 Sawmills, custom
 2421 Sawmills, except special product mills
 2429 Sawmills, special product: except lumber and veneer mills
 3425 Saws, hand: metalworking or wood-working
 3546 Saws, portable hand held: power driven—woodworking or metalworking
 3541 Saws, power (metalworking machinery)
 3553 Saws, power: bench and table (woodworking machinery)—except portable
 3841 Saws, surgical
 3931 Saxophones and parts
 3446 Scaffolds, metal (mobile or stationary)
 2499 Scaffolds, wood
 3579 Scales, for gummed tape: hand
 3829 Scales, nuclear radiation
 3576 Scales, including coin-operated and electronic scales
 3545 Scales, measuring (machinists' precision tools)
 2395 Scaloping, for the trade
 2819 Scandium
 3573 Scanners and readers, optical (input device)
 3553 Scarfing machines (woodworking machinery)
 2339 Scarfs, fascinator, hoods, headbands, etc.: women's and juniors'—*m/psm*
 2253 Scarfs, *mitse*
 2323 Scarfs: men's, youths', and boys'—*m/psm*
 2392 Scarfs: table, dresser, etc.—*m/psm*
 3531 Scarifier teeth bucket
 3531 Scarifiers, road
 2865 Scarlet 2 R lake
 2272 Scatter rug, tufted
 3999 Scenery for theaters, opera houses, halls, and schools
 2754 Schedules, transportation: gravure printing
 2751 Schedules, transportation: letterpress and screen printing
 2752 Schedules, transportation: lithographed
 2397 Schiffli machine embroideries
 2531 School furniture
 3231 Scientific apparatus glass, made from purchased glass

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STANDARD INDUSTRIAL CLASSIFICATION

- 3281** Scientific glassware, made from purchased glass
3229 Scientific glassware, pressed or blown: made in glassmaking plants
3829 Scintillation detectors
3421 Scissors: barbers', manicure, pedicure, tailors' and household
3949 Scoops, crab and fish
3423 Scoops, hand: metal
2499 Scoops, wood
3944 Scooters, children's
3993 Scoreboards, electric
2841 Scouring compounds
3559 Scouring machines (tannery equipment)
2299 Scouring of wool, mohair, and similar fibers
3291 Scouring pads, soap impregnated
3711 Scout cars (motor vehicles)
3731 Scows, building and repairing
2782 Scrapbooks
3532 Scraper loaders, underground
3531 Scrapers (construction machinery)
3423 Scrapers, woodworking: hand
2013 Scrapple, *m/fpm*
3531 Screeds and screeding machines
3442 Screen doors, metal
2261 Screen printing of cotton broad woven fabrics
2262 Screen printing of man-made fiber and silk broad woven fabrics
2751 Screen printing on glass, plastic, paper and metal including highway signs
2751 Screen printing, except on textiles
******** Screen printing, textiles—classify on basis of fiber
2893 Screen process ink
3531 Screeners, portable
3532 Screeners, stationary
3569 Screening and sifting machines, for general industrial use
3079 Screening, window: plastics
3496 Screening, woven wire: made from purchased wire
3442 Screens, door and window: metal frame
2431 Screens, door and window: wood
2511 Screens, privacy: wood
3861 Screens, projection
3953 Screens, textile printing
3541 Screw and nut slotting machines
3549 Screw downs and boxes
3423 Screw drivers
3549 Screw driving machines
3452 Screw eyes
3452 Screw hooks
******** Screw machine production of one product—code the product
3451 Screw machine products: produced on a job or order basis
3541 Screw machines, automatic
3362 Screw propellers: cast brass, bronze, copper and copper base
3452 Screws
3842 Screws, bone
3569 Screws, jack
2211 Scrim, cotton
3443 Scroll casings
2211 Scrub cloths, *mitse*
3589 Scrubbing machines
3299 Sculptures, architectural: gypsum, clay, or papier mache—factory only
3423 Scythes
3291 Scythestones, artificial
2091 Seafood products, canned
2092 Seafoods: fresh, quick frozen, and cold pack (frozen)—packaged
3579 Seal presses, notarial, etc.—hand
2851 Sealers, wood
2891 Sealing compounds for pipe threads and joints
2891 Sealing compounds, synthetic rubber and plastic
2295 Sealing or insulating tape for pipe, fiber-glass coated with tar or asphalt
2891 Sealing wax
3953 Seals, corporation
3953 Seals, hand (dies)
3679 Seals, hermetic: for electronic equipment
2752 Seals, lithographed
2751 Seals: printing or embossing only
3623 Seam welding apparatus, electric
3832 Searchlight mirrors and reflectors
3646 Searchlights
2033 Seasonings (prepared sauces), tomato
2035 Seasonings (prepared sauces), vegetable: except tomato
2099 Seasonings, meat: except sauces
2399 Seat belts, automobile and aircraft: except leather
3199 Seat belts, leather
2211 Seat cover cloth, automobile: cotton
2399 Seat covers, automobile: *m/fpm*
2499 Seat covers, rattan
3723 Seat ejector devices, aircraft
3751 Seat posts, motorcycle and bicycle
2514 Seats for metal household furniture
2426 Seats, chair: hardwood

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- 2531 Seats, railroad
 2499 Seats, toilet: regardless of material
 2531 Seats: automobile, aircraft, railroad and other public conveyances
 2869 Sebacic acid
 2869 Sebacic acid esters
 3341 Secondary refining and smelting of non-ferrous metals
 2511 Secretaries, household: wood
 3443 Sections for prefabricated metal buildings
 2452 Sections for prefabricated wood buildings
 3496 Sections, pipe: fabricated from purchased pipe
 2753 Security certificates, engraved
 3532 Sedimentation machinery, mineral
 3523 Seeders (agricultural machinery)
 2211 Seersuckers, cotton
 3259 Segment blocks, clay
 3731 Seiners, building and repairing
 3811 Seismographs
 3811 Seismometers
 3811 Seismoscopes
 3339 Selenium refining, primary
 3341 Selenium refining, secondary
 2045 Self-rising flour, *mfp*
 3519 Semi-diesel engines for stationary, marine, traction, or other uses
 3674 Semiconductor circuit networks (solid state integrated circuits)
 3825 Semiconductor test equipment
 3674 Semiconductors (transistors, diodes, etc.)
 3321 Semisteel castings
 3321 Semisteel foundries
 3715 Semitrailers for missile transportation
 3715 Semitrailers for truck tractors
 2041 Semolina (flour)
 3861 Sensitometers, photographic
 3693 Sentinel, cardiac
 3532 Separating machinery, mineral
 3569 Separators for steam, gas, vapor, and air (machinery)
 3069 Separators, battery: rubber
 2499 Separators, battery: wood
 3523 Separators, cream (agricultural equipment)
 3551 Separators, cream (food products machinery)
 3523 Separators, grain and berry (agricultural machinery)
 3443 Separators, industrial process: metal plate
 3272 Septic tanks, concrete
 3443 Septic tanks, metal plate
 3079 Septic tanks, plastics
 3823 Sequencing controls for electric heat
 2231 Serges of wool, mohair, and similar fibers
 2221 Serges, man-made fiber
 3629 Series capacitors, except electronic
 2831 Serobacterins
 2831 Serums
 3328 Service apparel, washable: hospital, professional, barbers', bakers', etc.
 2339 Service apparel, washable: nurses', maids', waitresses', etc.
 3589 Servicing machines, coin-operated: except dry cleaning and laundry
 3621 Servo motors
 2831 Set-up boxboard, *mitse*
 3589 Sewage purification equipment
 3811 Sewage testing apparatus
 3589 Sewer cleaning equipment, power
 3259 Sewer liner brick, vitrified clay
 3259 Sewer pipe and fittings, clay
 3331 Sewer pipe, cast iron
 3272 Sewer pipe, concrete
 3172 Sewing cases, regardless of material
 3999 Sewing kits, novelty: other than sewing cases and cabinets
 2517 Sewing machine cabinets and cases, wood
 3636 Sewing machines and attachments, domestic and industrial
 2284 Sewing thread: cotton, silk, and man-made fiber
 3811 Sextants
 2296 Shade cloth, coated or impregnated
 2211 Shade cloth, window: cotton
 2591 Shade pulls, window
 2394 Shades, canvas
 3999 Shades, lamp and candle: except glass and metal
 3229 Shades, lamp: glass
 3645 Shades, lamp: metal
 2591 Shades, porch: made of wood slats
 2591 Shades, window
 3811 Shadowgraphs
 3568 Shafts, flexible
 3949 Shafts, golf club
 2429 Shakes (hand split shingles)
 3295 Shale, expanded
 2844 Shampoos

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STANDARD INDUSTRIAL CLASSIFICATION

- 3181 Shanks, shoe
 2221 Shantungs, man-made fiber and silk
 3553 Shapers (woodworking machinery)
 3541 Shapers and slotters
 3545 Shaping tools (machine tool accessories)
 3991 Shaving brushes
 3541 Shaving machines (metalworking)
 2844 Shaving preparations: cakes, creams, lotions, powders, tablets, etc.
 2253 Shawls, *mitse*
 3545 Shear knives
 3543 Shearing machines, power
 3111 Shearling (prepared sheepskin)
 3421 Shears, hand: barbers', manicure, pedicure, tailors', and household
 3421 Shears, hedge: except power
 3421 Shears, metal cutting: hand
 3523 Shears, sheep: power
 2861 Sheathing paper, *mitse*
 2952 Sheating, asphalt saturated: made from purchased materials
 2879 Sheep dips, chemical
 3523 Sheep shears, power
 2011 Sheep slaughtering plants
 3211 Sheet glass
 3211 Sheet glass blanks for optical or ophthalmic uses
 3444 Sheet metal specialties, not stamped
 3444 Sheet metal work: cornices, ventilators, skylights, gutters, tanks, etc.
 3542 Sheet metalworking machines
 2754 Sheet music: gravure printing (not publishing)
 2751 Sheet music: letterpress and screen printing (not publishing)
 3312 Sheet pilings, plain: iron and steel—made in steel works or rolling mills
 3316 Sheet steel, cold rolled: not made in hot rolling mills
 3292 Sheet, asbestos cement: flat or corrugated
 2211 Sheeting, cotton: *mitse*
 3069 Sheeting, rubber or rubberized fabric
 2211 Sheets and sheeting, cotton: *mitse*
 3353 Sheets, aluminum
 3351 Sheets, copper and copper alloy
 2653 Sheets, corrugated and solid fiberboard: *mfp*
 2392 Sheets, fabric: *mfp*
 3312 Sheets, galvanized iron and steel
 3069 Sheets, hard rubber
 2392 Sheets, hospital: nonwoven textile
 3312 Sheets, iron and steel: made in steel works or rolling mills
 3079 Sheets, plastics
 3356 Sheets: lead, magnesium, nickel, tin, titanium, zinc, and their alloys
 2048 Shell crushing, for feed
 3351 Shell discs, copper and copper alloy
 3483 Shell loading and assembly plants, for ammunition over 80 mm.
 3999 Shell novelties
 3312 Shell slugs, steel: made in steel works or rolling mills
 2851 Shellac (protective coating)
 3523 Shellers, corn (agricultural machinery)
 3523 Shellers, nut (agricultural machinery)
 2091 Shellfish, canned
 2092 Shellfish, quick frozen and cold pack (frozen)
 3483 Shells, artillery: over 80 mm. (or over 1.18 inch)
 3483 Shells, small arms: 80 mm. and below—empty, blank, and loaded
 2542 Shelving angles and slotted bars, metal
 2542 Shelving, office and store: metal
 2541 Shelving, office and store: wood
 3479 Sherardizing of metals and metal products, for the trade
 3567 Sherardizing ovens
 2624 Sherbets and ices
 2385 Shields, waterproof: except vulcanized rubber—*mfp*
 3499 Shims, metal
 2411 Shingle bolts, wood: hewn
 2429 Shingle mills
 3292 Shingles, asbestos cement
 2952 Shingles, asphalt or tar saturated felt: strip and individual
 2429 Shingles, wood: sawed or hand split
 3731 Ship building and repairing
 3531 Ship capstans
 3531 Ship cranes and derricks
 2599 Ship furniture
 3999 Ship models, except toy and hobby models
 3362 Ship propellers: cast brass, bronze, copper and copper base
 3441 Ship sections, prefabricated metal
 3531 Ship winches
 3357 Shipboard cable, nonferrous
 2648 Shipping bags or sacks, including multi-wall and heavy duty: *mfp*

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- 3412** Shipping barrels, kegs, and pails: metal—light and heavy types
2449 Shipping cases and drums, wood: wire-bound
2441 Shipping cases, wood: nailed or lock corner
2655 Shipping hampers, vulcanized fiber: *mfp*
2621 Shipping sack paper, *mitse*
2329 Shirt and slack suits: men's, youths', and boys'
2396 Shirt linings
3963 Shirt studs, except precious metal and precious or semiprecious stones
3911 Shirt studs, precious metal and precious or semiprecious stones
2211 Shirting fabrics, cotton
2221 Shirting fabrics, man-made fiber and silk
2253 Shirts (outerwear), *mitse*
2254 Shirts (underwear), *mitse*
2321 Shirts, except work shirts: men's and boys'—*mfp*
2321 Shirts, flannel: except work shirts—men's, youths', and boys'
2328 Shirts, work: flannel—men's youths', and boys'
2328 Shirts, work: men's, youths' and boys'
2361 Shirts: girls', children's, and infants'—*mfp*
2331 Shirts: women's, misses', and juniors'—*mfp*
3714 Shock absorbers, motor vehicle
3542 Shock wave metal forming machines
2392 Shoe bags, *mfp*
2631 Shoe board, *mitse*
2342 Shoe cleaners and polishes
3131 Shoe cut stock and findings
2499 Shoe display forms, regardless of material
3149 Shoe dyeing for the trade
2211 Shoe fabrics, *mitse*
3131 Shoe heels, finished wood or leather
3079 Shoe heels, plastics
3069 Shoe heels: rubber, composition, and fiber
3161 Shoe kits, regardless of material
2241 Shoe laces, except leather
3131 Shoe laces, leather
3131 Shoe linings, leather
2259 Shoe linings, *mitse*
3559 Shoe making and repairing machinery
3999 Shoe patterns
3131 Shoe pegs
3634 Shoe polishers, electric
3079 Shoe soles and soling strips, plastics
3069 Shoe soles and soling strips: rubber, composition, and fiber
3131 Shoe soles: except rubber, composition, plastics, and fiber
3953 Shoe stamps, steel
2499 Shoe stretchers, regardless of material
2499 Shoe trees, regardless of material
3149 Shoes, athletic: except rubber
3149 Shoes, children's and infants: except house slippers and rubber footwear
3942 Shoes, doll
3842 Shoes, extension: orthopedic
3143 Shoes, men's: except slippers, athletic, rubber and extension shoes
3021 Shoes, plastics soles molded to fabric uppers
3021 Shoes, rubber or rubber soled fabric uppers
3144 Shoes, women's: except slippers, athletic, and rubber footwear
3149 Shoes: novelty, wooden, etc.
2441 Shook, box
3949 Shooting equipment, except firearms and ammunition
2643 Shopping bags, *mfp*
2741 Shopping news: publishing and printing, or publishing only
2079 Shortenings, compound and vegetable
3579 Shorthand machines
2327 Shorts (outerwear): men's, youths', and boys'
2322 Shorts (underwear): men's, youths', and boys'—*mfp*
2369 Shorts, girls' and children's: outerwear—*mfp*
2254 Shorts, *mitse*
2339 Shorts: women's, misses', and juniors' (outerwear)—*mfp*
3398 Shot peening—treating steel to reduce fatigue
3482 Shot, lead
3482 Shotgun ammunition: empty, blank, and loaded
3484 Shotguns and parts
2396 Shoulder pads: for coats, suits, etc.—men's and women's
2396 Shoulder straps, for women's underwear: *mfp*
2253 Shoulderettes, *mitse*

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STANDARD INDUSTRIAL CLASSIFICATION

- | | |
|---|--|
| 3531 Shovel loaders, wheel tractor | 3569 Sifting and screening machines, for general industrial use |
| 3423 Shovels, hand | 3662 Sighting and fire control equipment, electronic type |
| 3531 Shovels, power | 3832 Sighting and fire control equipment, optical |
| 2542 Showcases, except refrigerated: metal | 3489 Sights, gun: except optical—over 30 mm. (or over 1.18 inch) |
| 2541 Showcases, except refrigerated: wood | 3484 Sights, gun: except optical—30 mm. (or 1.18 inch) and below |
| 3585 Showcases, refrigerated | 3832 Sights, telescopic |
| 2392 Shower curtains, <i>mpfm</i> | 3357 Signal and control cable, nonferrous |
| 3231 Shower doors: made from purchased glass | 2899 Signal flares, marine |
| 3272 Shower receptors, concrete | 3325 Signal generators and averagers |
| 3432 Shower rods | 3662 Signaling apparatus, electric |
| 3021 Shower sandals or slippers, rubber | 3612 Signaling transformers, electric |
| 3149 Shower sandals, except rubber | 3714 Signals, directional: motor vehicle |
| 3079 Shower stalls, fiberglass and plastics | 3662 Signals: railway, highway, and traffic—electric |
| 3431 Shower stalls, metal | 2499 Signboards, wood |
| 3523 Shredders (agricultural machinery) | 3993 Signs, not made in custom sign painting shops |
| 2091 Shrimp, canned | 2211 Silesia, cotton |
| 2092 Shrimp, quick frozen and cold pack (frozen) | 2819 Silica gel |
| 3273 Shrink-mixed concrete | 2819 Silica, amorphous |
| 2231 Shrinking cloth of wool, mohair, and similar fibers: for the trade | 2819 Silicofluorides |
| 2261 Shrinking cotton cloth, for the trade | 3291 Silicon carbide abrasives |
| 2262 Shrinking man-made fiber and silk cloth, for the trade | 3339 Silicon refining, primary (over 99% pure) |
| **** Shrinking textiles for tailors and dress-makers—see nonmanufacturing | 3339 Silicon, epitaxial (silicon alloy) |
| 3825 Shunts, electrical | 3339 Silicon, pure |
| 3494 Shutoff valves | 3295 Silicon, ultra high purity: treated purchased materials |
| 3861 Shutters, camera | 2821 Silicone fluid solution (fluid for sonar transducers) |
| 3442 Shutters, door and window: metal and metal covered | 2821 Silicone resins |
| 2431 Shutters, door and window: wood | 2822 Silicone rubbers |
| 3079 Shutters, plastics | 2869 Silicones |
| 2426 Shuttle blocks: hardwood | 2262 Silk broad woven fabric finishing |
| 3532 Shuttle cars, underground | 2221 Silk broad woven fabrics |
| 3552 Shuttles for textile weaving | 2352 Silk hats, except millinery |
| 3423 Sickles, hand | 2241 Silk narrow fabrics |
| 2421 Siding (dressed lumber) | 3552 Silk screens, for the textile industry |
| 3292 Siding, asbestos cement | 2284 Silk thread |
| 2952 Siding, asphalt brick | 2282 Silk throwing, twisting, winding, or spooling |
| 2952 Siding, insulating: impregnated—made from purchased materials | 2281 Silk yarn, spinning |
| 2661 Siding, insulating: paper or board, impregnated or not— <i>mitse</i> | 3272 Sills, concrete |
| 3079 Siding, plastics | 3523 Silo fillers (agricultural machinery) |
| 3272 Siding, precast stone | 3272 Silo staves, cast stone |
| 3444 Siding, sheet metal | 2431 Silo staves, wood |
| 2816 Siennas | 2421 Silo stock, wood: sawed |
| 3496 Sieves, made from purchased wire | |
| 3551 Sifters (food machinery) | |

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- 3251 Silo tile
 3523 Silo unloaders
 3531 Silos, cement (batch plant)
 3448 Silos, metal
 3272 Silos, prefabricated concrete
 3356 Silver and silver alloy bars, rods, sheets, strip, and tubing
 2819 Silver bromide, chloride, and nitrate
 2819 Silver compounds, inorganic
 3497 Silver foil and leaf
 3399 Silver powder, except artists' materials
 3339 Silver refining, primary
 3356 Silver rolling and drawing
 3341 Silver smelting and refining, secondary
 3341 Silver, recovery of: from used photographic film
 3231 Silvered glass, made from purchased glass
 3914 Silversmithing
 2511 Silverware chests, wood (floor standing)
 3914 Silverware: nickel silver, silver plated, solid silver, and sterling
 2541 Sink tops, plastic laminated
 3949 Sinkers (fishing tackle)
 3261 Sinks, vitreous china
 3431 Sinks: enameled iron, cast iron, and pressed metal
 3585 Siphons, soda water
 3662 Sirens, electric: vehicle, marine, industrial, and air raid
 2061 Sirup, cane: made from sugarcane
 2062 Sirup, cane: made in sugar refineries from purchased sugar
 2099 Sirup, chocolate: made from purchased chocolate
 2046 Sirup, corn: unmixed
 2062 Sirup, refiners'
 2087 Sirups, beverage
 2066 Sirups, chocolate: made in chocolate plants
 2087 Sirups, flavoring
 2082 Sirups, malt
 2834 Sirups, pharmaceutical
 2099 Sirups, sweetening: honey, maple sirup, sorghum
 2899 Size, glue
 3952 Sizes, artists': gold and bronze
 2899 Sizes: animal, vegetable, and synthetic plastics materials
 3949 Skates and parts, ice and roller
 3312 Skelp, iron and steel
 3952 Sketching boxes, artists'
 2499 Skewers, wood
 2339 Ski jackets and pants: women's, misses', and juniors'—*mjpm*
 2329 Ski pants: men's, youths', and boys'
 2363 Ski suits, girls' and children's: *mjpm*
 2253 Ski suits, *mitse*
 2329 Ski suits: men's, youths', and boys'
 2339 Ski suits: women's, misses', and juniors'—*mjpm*
 3537 Skid boxes, metal
 3496 Skid chains, made from purchased wire
 3443 Skid tanks, metal plate
 2411 Skidding logs
 2448 Skids and pallets, wood or wood and metal combination
 3537 Skids, metal
 2448 Skids, wood
 3732 Skiffs, building and repairing
 2023 Skim milk: concentrated, dried, and powdered
 3949 Skin diving equipment, scuba type: except clothing
 3841 Skin grafting equipment
 3111 Skins: tanning, currying, and finishing
 2396 Skirt linings
 3111 Skirting leather
 2231 Skirtings
 2253 Skirts, *mitse*
 2337 Skirts, separate: women's, misses', and juniors'—*mjpm*
 2369 Skirts: girls', children's and infants'—*mjpm*
 3949 Skis and skiing equipment, except apparel
 3111 Skivers, leather
 3211 Skylight glass
 3444 Skylights, sheet metal
 3334 Slabs, aluminum: primary
 3331 Slabs, copper: primary
 3272 Slabs, crossing: concrete
 3332 Slabs, lead: primary
 3339 Slabs, magnesium: primary
 3312 Slabs, steel
 3333 Slabs, zinc: primary
 2253 Slacks or pants, *mitse*
 2327 Slacks, dress (separate): men's, youths', and boys'—*mjpm*
 2328 Slacks, except dress: men's, youths', and boys'—*mjpm*
 2369 Slacks, girls' and children's: *mjpm*
 2339 Slacks: women's, misses', and juniors'—*mjpm*
 3531 Slag mixers
 3295 Slag, crushed or ground

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STANDARD INDUSTRIAL CLASSIFICATION.

- 3552 Slashing machines (textile machinery)
 3281 Slate and slate products
 2441 Slats, trunk: wood
 2047 Slaughtering of nonfood animals
 2011 Slaughtering plants: except nonfood animals
 2099 Slaw, cole: in bulk
 3423 Sledges (hand tools)
 3944 Sleds, children's
 2399 Sleeping bags
 3743 Sleeping cars, railroad
 3069 Sleeves, pump: rubber
 3199 Sleeves, welders': leather
 2295 Sleeveing, textile: saturated
 3551 Slicing machines, fruit and vegetable: commercial types
 2241 Slide fastener tapes
 3964 Slide fasteners (zippers)
 3811 Slide rules
 3999 Slides and exhibits for classroom use, preparation of
 3536 Slings, holsting
 3496 Slings, lifting: made from purchased wire
 2298 Slings, rope
 2211 Slip cover fabrics, cotton
 2221 Slip cover fabrics, man-made fiber and silk
 2392 Slip covers: made of fabric, plastic, and other material—except paper
 3621 Slip rings, for motors and generators
 3579 Slip sheeting machines
 3142 Slipper socks, made from purchased socks
 2252 Slipper socks, *mitse*
 3149 Slippers, ballet
 3142 Slippers, house
 2254 Slips, *mitse*
 2341 Slips: women's, misses', children's, and infants'—*m/psm*
 3841 Slit lamps (ophthalmic goods)
 3549 Slitters, rotary (metalworking machines)
 3999 Slot machines
 3541 Slotting machines (machine tools)
 2299 Slubs and nubs (cutting up fibers for use in tweeds)
 3599 Sludge tables
 3355 Slugs, aluminum
 3351 Slugs, copper and copper alloy
 3555 Slugs, printers'
 3251 Slumped brick
 2899 Slushing compounds, gun
 3482 Small arms ammunition, 30 mm. (or 1.18 inch) and below
 2016 Small game dressing
 3559 Smelting and refining machinery and equipment, except ovens
 3332 Smelting and refining of lead, primary
 3341 Smelting and refining of nonferrous metals, secondary
 3333 Smelting and refining of zinc, primary
 3339 Smelting of nonferrous metal, primary: except copper, lead, zinc, aluminum
 3567 Smelting ovens
 3443 Smelting pots and retorts
 2339 Smocks: women's, misses', and juniors'
 3489 Smoke generators (ordnance)
 2013 Smoked meats, *m/psm*
 2892 Smokeless powder
 3999 Smokers, bee (beekeepers' supplies)
 3269 Smokers' articles, pottery
 3229 Smokers' glassware: ash tray, tobacco jars, etc.
 3443 Smokestacks, boiler plate
 2514 Smoking stands, metal
 2511 Smoking stands, wood
 2131 Smoking tobacco
 2271 Smyrna carpets and rugs, machine woven
 3546 Snagging grinders
 3643 Snap switches, electric
 3421 Snips, tanners'
 2499 Snow fence
 2421 Snow fence lath
 3531 Snow plow attachments
 3711 Snow plows (motor vehicles)
 2363 Snow suits: girls' and children's: *m/psm*
 2329 Snow suits: men's, youths', and boys'
 2339 Snow suits: women's, misses', and juniors'—*m/psm*
 3524 Snowblowers and throwers, residential
 3799 Snowmobiles
 3949 Snowshoes
 3644 Snubbers for CATV systems
 2131 Snuff
 3261 Soap dishes, vitreous china and earthenware
 3999 Soap dispensers
 2641 Soap impregnated papers and paper wash cloths, *m/psm*
 2842 Soap, saddle
 2841 Soap: granulated, liquid, cake, flaked, and chip
 2869 Soaps, naphthenic acid
 3949 Soccer equipment, except apparel
 3545 Sockets (machine tool accessories)
 3643 Sockets, electric
 3679 Sockets, electronic tube
 2252 Socks, seamless and full-fashioned

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- 3142 Socks, slipper: made from purchased socks
 2252 Socks, slipper: *mitse*
 3842 Socks, stump
 2819 Soda alum
 2812 Soda ash
 3585 Soda fountains, parts, and accessories
 2654 Soda straws, except glass or plastic: *mjpm*
 2812 Soda, caustic
 2869 Sodium acetate
 2869 Sodium alginate
 2819 Sodium aluminate
 2819 Sodium aluminum sulfate
 2819 Sodium antimoniate
 2879 Sodium arsenite (formulated)
 2869 Sodium benzoate
 2812 Sodium bicarbonate
 2819 Sodium bichromate and chromate
 2819 Sodium borates
 2819 Sodium borohydride
 2819 Sodium bromide, not produced at mines
 2812 Sodium carbonate (soda ash)
 2819 Sodium chlorate
 2834 Sodium chloride solution for injection, U.S.P.
 2899 Sodium chloride, refined
 2819 Sodium compounds, inorganic
 2819 Sodium cyanide
 2869 Sodium glutamate
 2819 Sodium hydrosulfite
 2812 Sodium hydroxide (caustic soda)
 2842 Sodium hypochlorite
 2819 Sodium molybdate
 2869 Sodium pentachlorophenate
 2819 Sodium perborate
 2819 Sodium peroxide
 2819 Sodium phosphate
 2819 Sodium polyphosphate
 2834 Sodium salicylate tablets
 2843 Sodium salts of sulfonated oils, fats, or greases
 2819 Sodium silicate
 2819 Sodium silicofluoride
 2819 Sodium stannate
 2819 Sodium sulfate—bulk or tablets
 2869 Sodium sulfoxalate formaldehyde
 2819 Sodium tetraborate, not produced at mines
 2819 Sodium thiosulfate
 2819 Sodium tungstate
 2819 Sodium uranate
 2819 Sodium, metallic
 2515 Sofa beds, on frames of any material
 2512 Sofas, upholstered on wood frames
 2086 Soft drinks, bottled or canned
 2298 Soft fiber cordage and twine
 2843 Softeners (textile assistants)
 2861 Softwood distillates
 3531 Soil compactors: vibratory-pan and vibratory-roller types
 2879 Soil conditioners
 3321 Soil pipe, cast iron
 3523 Soil pulverizers (agricultural machinery)
 3523 Soil pulverizers and packers (agricultural machinery)
 2899 Soil testing kits
 3674 Solar cells
 3433 Solar heaters
 3341 Solder (base metal), pig and ingot: secondary
 3356 Solder wire, bar: acid core and rosin core
 2899 Soldering fluxes
 3911 Soldering for the jewelry trade
 3423 Soldering guns and tools, hand: electric
 3423 Soldering iron tips and tiplets
 3423 Soldering irons and coppers
 3549 Soldering machines, except hand
 3643 Solderless connectors (electric wiring devices)
 3111 Sole leather
 3622 Solenoid switches (industrial controls)
 3494 Solenoid valves
 3679 Solenoids for electronic applications
 3131 Soles, boot and shoe: except rubber, composition, plastics, and fiber
 3079 Soles, boot and shoe: plastics
 3069 Soles, boot and shoe: rubber, composition, and fiber
 2819 Solid fuel propellants, inorganic
 2869 Solid fuel propellants, organic
 3674 Solid state electronic devices
 3079 Soling strips, boot and shoe: plastics
 3069 Soling strips, boot and shoe: rubber, composition, and fiber
 3295 Solite, ground or otherwise treated
 2843 Soluble oils and greases
 2834 Solutions, pharmaceutical
 2865 Solvent naphtha, product of coal tar distillation
 2842 Solvent, degreasing
 2899 Solvents, carbon
 2842 Solvents, drain pipe
 2869 Solvents, organic
 2911 Solvents, produced in petroleum refineries

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STANDARD INDUSTRIAL CLASSIFICATION

3662	Sonar equipment	3199	Spats
2869	Sorbitol	3069	Spatulas, rubber
2041	Sorghum grain flour	3651	Speaker monitors
2099	Sorghum, including custom refining	3651	Speaker systems
3579	Sorters, filing: office	2399	Spearmint oil
3573	Sorters, punch card	3949	Spears, fishing
3523	Sorting machines for agricultural products	2631	Special food board, <i>mitse</i>
3573	Sorting machines, card	3111	Specialty leathers
2542	Sorting racks, mail: metal	3612	Specialty transformers
3861	Sound recording and reproducing equipment, motion picture	3632	Specific ion measuring instruments
3651	Sound reproducing equipment: except motion picture	3211	Spectacle glass
3662	Sound signaling devices, electrical	3851	Spectacles
2034	Soup mixes	3832	Spectrographs
2034	Soup powders	3832	Spectrometers and spectroscopes, optical instruments
2091	Soup, seafood: canned	3829	Spectrometers, liquid scintillation and nuclear
2034	Soups, dehydrated	3825	Spectrum analyzers
2032	Soups, except seafood: canned	3841	Speculums
2038	Soups, frozen: except seafood soups	3566	Speed changers (power transmission equipment)
2092	Soups, seafood: frozen	3573	Speed computers
2753	Souvenir cards, engraved	3824	Speed indicators and recorders, vehicle
2752	Souvenir cards, lithographed	3824	Speedometers
2754	Souvenir cards: gravure printing	3333	Spelter (zinc), primary
2751	Souvenir cards: letterpress and screen printing	3443	Spheres, for liquids or gas: metal plate
2035	Soy sauce	3841	Sphygmomanometers
2851	Soyate driers	2099	Spices, including grinding
2824	Soybean fibers (man-made textile materials)	3312	Spiegeleisen, made in blast furnaces
2075	Soybean oil, cake, and meal	3432	Spigots, metal
2821	Soybean plastics	2499	Spigots, wood
3769	Space capsules	3312	Spikes and spike rods, made in steel works or rolling mills
3433	Space heaters, except electric	3399	Spikes, aluminum and other nonferrous metal and wire
3443	Space simulation chambers, metal plate	3315	Spikes, steel: wire or cut
3842	Space suits	2241	Spindle banding
3761	Space vehicles, complete	3552	Spindles, textile
3423	Spades, hand	3728	Spinners, aircraft propeller
2038	Spaghetti and meat balls, frozen	3542	Spinning lathes
2032	Spaghetti, canned	3542	Spinning machines, metal
2098	Spaghetti, except canned	3552	Spinning machines, textile
2221	Spandex broad woven fabrics	3469	Spinning metal, for the trade
3272	Spanish floor tile, concrete	2284	Spinning thread: cotton, silk, and man-made fiber
2032	Spanish foods, canned	2283	Spinning wool carpet and rug yarn: wool, mohair, or animal fiber
3295	Spar, ground or otherwise treated	2281	Spinning yarn: cotton, silk, and man-made staple
3264	Spark plug porcelain	2283	Spinning, twisting, winding, or spooling yarn: wool, mohair, etc.
3825	Spark plug testing instruments, electric	3496	Spiral cloth, made from purchased wire
3694	Spark plugs, for internal combustion engines		
2084	Sparkling wines, including champagne		
2499	Spara, wood		

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2899 Spirit duplicating fluid
 2085 Spirits, neutral except fruit: for beverage purposes
 2834 Spirits, pharmaceutical
 3861 Splicers, motion picture film
 3542 Spline rolling machines
 2449 Splint baskets, for fruits and vegetables
 3842 Splints, pneumatic and wood
 3111 Splits, leather
 2499 Spokes, wood
 2051 Sponge goods (bakery products)
 3312 Sponge iron
 3069 Sponge rubber and sponge rubber products
 3999 Sponges, bleaching and dyeing of
 3079 Sponges, cellulose
 3069 Sponges, rubber
 3291 Sponges, scouring: metallic
 3842 Sponges, surgical
 2231 Sponging and refinishing cloth of wool and similar fibers: for the trade
 2261 Sponging and refinishing cotton cloth, for the trade
 **** Sponging textiles for tailors and dress-makers—see nonmanufacturing
 2426 Spool blocks and blanks, wood
 2282 Spooling yarn: cotton, silk, and man-made fiber continuous filament
 2283 Spooling yarn: wool, mohair, or similar animal fiber
 2499 Spools except for textile machinery, wood
 2655 Spools, fiber (metal end or all fiber): *mfp*
 3552 Spools, textile machinery: wood
 2654 Spoons, paper: *mfp* except those made from pressed or molded pulp
 2646 Spoons, pressed and molded pulp: *mfp*
 3914 Spoons: silver, nickel silver, pewter, stainless steel, and plated
 2329 Sports clothing, nontailored: men's, youths', and boys'—*mfp*
 2253 Sports shirts, *misc*
 2321 Sports shirts: men's, youths', and boys'—*mfp*
 3949 Sporting goods: except clothing, firearms, and ammunition
 2892 Sporting powder (explosive)
 3623 Spot welding apparatus, electric
 3647 Spotlights, automobile
 3648 Spotlights, except automobile
 3832 Spotting boards (sighting and fire control equipment)
 3079 Spouting, fiberglass
 3079 Spouting, plastics: glass fiber reinforced
 3444 Spouts, sheet metal
 3499 Spray nozzles, aerosol
 3523 Sprayers, hand: agricultural
 3563 Sprayers, hand: except agricultural
 3528 Spraying machines (agricultural machinery)
 3563 Spraying outfits for metals, paints, and chemicals (compressor units)
 3962 Sprays, garlands and wreaths: made from tree boughs, cones, etc.
 3531 Spreaders and finishers (construction equipment)
 3523 Spreaders, fertilizer
 2022 Spreads, sandwich cheese
 2013 Spreads, sandwich: meat—*mfp*
 2515 Spring cushions
 3452 Spring pins
 3495 Spring units for seats, made from purchased wire
 3452 Spring washers
 3542 Spring winding and forming machines
 2515 Springs, assembled: bed and box
 3495 Springs, except complete bed springs: made from purchased wire
 3495 Springs, precision: clock, gun, instrument, and mechanical—*mfp*
 3493 Springs, steel: except wire
 3569 Sprinkler systems, automatic
 3494 Sprinkler systems, field
 3432 Sprinklers, lawn
 3568 Sprockets (power transmission equipment)
 2083 Sprouts, made in maltheuses
 2024 Spumoni
 3469 Spun metal products
 2297 Spunbonded fabrics
 3832 Spyglasses
 3272 Squares for walls and ceilings, concrete
 3949 Squash equipment, except apparel
 2892 Squibbs, electric
 3728 Stabilizers, aircraft
 3499 Stabilizing bars (cargo), metal
 3523 Stackers, hay and grain
 3537 Stackers, power (industrial truck stacker)
 3537 Stacking carts
 3536 Stacking machines, automatic

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STANDARD INDUSTRIAL CLASSIFICATION

- 3999 Stage hardware and equipment, except lighting equipment
 3648 Stage lighting equipment
 2842 Stain removers
 3231 Stained glass, made from purchased glass
 3312 Stainless steel
 3398 Stainless steel, brazing (hardening) for the trade
 2865 Stains for leather
 2865 Stains, biological
 2851 Stains: varnish, oil, and wax
 3534 Stair elevators: motor powered
 3446 Stair railings, metal
 2431 Stair treads, wood
 3446 Stair treads, fabricated metal
 3069 Stair treads, rubber
 2431 Staircases and stairs, wood
 3446 Staircases, prefabricated metal
 3446 Stairs, prefabricated metal
 3534 Stairways, moving
 2499 Stakes, surveyors': wood
 3523 Stalk choppers, shredders
 3261 Stall urinals, vitreous china
 3469 Stamp and cash boxes, stamped metal
 2899 Stamp pad ink
 3953 Stamp pads
 2395 Stamped art goods for embroidering, *m/pm*
 3953 Stamping devices, hand
 2396 Stamping fabric articles
 2899 Stamping ink
 3469 Stamping metal, for the trade
 3532 Stamping mill machinery (mining machinery)
 3953 Stamps, hand: time, date, postmark, cancelling, shoe and textile marking
 3579 Stamps, time: containing clock mechanisms
 3523 Stanchions and standards, barn
 3825 Standard cells
 3811 Standards and calibrating equipment, laboratory
 3825 Standards and calibration equipment for electrical measuring, except lab
 3825 Standing wave ratio measuring equipment
 3443 Standpipes
 3861 Stands, camera and projector
 3537 Stands, ground servicing aircraft
 2542 Stands, merchandise display: metal
 2541 Stands, merchandise display: wood
 3931 Stands, music
 2511 Stands: telephone, bedside, smoking, etc.—wood
 2819 Stannic and stannous chloride
 3579 Staple removers
 3399 Staples, brass and other nonferrous metal and wire
 3315 Staples, steel: wire or cut
 3496 Staples, wire: made from purchased wire
 3579 Stapling machines, hand or power
 2046 Starch, instant
 2046 Starch, liquid
 2046 Starches, edible and industrial
 2842 Starches, plastic
 3634 Starters and starter parts, internal combustion engine
 3724 Starters, aircraft: nonelectric
 3622 Starters, electric motor
 3643 Starters, fluorescent
 3621 Starting equipment, for street cars
 3694 Starting motors, automobile and aircraft
 3643 Starting switches, fluorescent
 3629 Static elimination equipment, industrial
 3822 Static pressure regulators
 3711 Station wagons (motor vehicles)
 3229 Stationers' glassware: inkwells, clip cups, etc.
 3969 Stationers' sundries, rubber
 3269 Stationery articles, pottery
 2753 Stationery, engraved
 2648 Stationery, *m/pm*
 2754 Stationery: gravure printing
 2751 Stationery: letterpress and screen printing
 2721 Statistical reports (periodicals), publishing of
 3621 Stators, for motors
 3281 Statuary, marble
 3299 Statuary: gypsum, clay, papier mache, scagliola, and metal—factory only
 2411 Stave bolts, wood: hewn
 2429 Staves, barrel: sawed or split
 3272 Staves, silo: concrete
 3131 Stays, shoe
 3494 Steam and hot water valves, except plumbers' brass goods and fittings
 3293 Steam and other packing
 3443 Steam condensers
 3589 Steam cookers, restaurant type
 3511 Steam engines, except locomotives
 3494 Steam fittings and specialties, except plumbers' brass goods and fittings
 3511 Steam governors
 3433 Steam heating apparatus, domestic
 3443 Steam jet aftercoolers
 3443 Steam jet intercondensers

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3822 Steam pressure controls, residential and commercial type
 3569 Steam separators (machinery)
 3589 Steam tables
 3494 Steam traps
 3511 Steam turbine generator set units, complete
 3511 Steam turbines
 2899 Stearic acid
 2869 Stearic acid esters
 2869 Stearic acid salts
 2977 Stearin, animal: inedible
 3264 Steatite porcelain insulators
 3295 Steatite, ground or otherwise treated
 3399 Steel balls
 3316 Steel bars, sheets, and strip: cold rolled—not made in hot rolling mills
 3325 Steel castings, except investment
 3325 Steel foundries, except investment
 3441 Steel joists, open web: long-span series
 2753 Steel line engraving, for the printing trade
 3547 Steel rolling machinery
 3291 Steel shot abrasives
 3493 Steel springs, except wire
 3441 Steel tri-level railroad car racks (for transporting motor vehicles, etc.)
 3291 Steel wool
 3312 Steel works producing bars, rods, plates, sheets, structural shapes, etc.
 3313 Steel, electrometallurgical
 2946 Steepwater concentrate
 3714 Steering mechanisms, motor vehicle
 2141 Stemming and redrying of tobacco
 3229 Stemware, glass
 2645 Stencil board, *mfp*
 2631 Stencil board, *mit*
 2645 Stencil cards for addressing machines, *mfp*
 2899 Stencil correction compounds
 3953 Stencil machines (marking devices)
 3955 Stencil paper for typewriters
 3955 Stencil paper, gelatin or spirit process
 3953 Stencils for use in painting and marking: metal, cardboard, etc.
 3679 Step positioners for transmitting equipment
 2341 Step-ins, *mfp*
 2254 Step-ins, *mit*
 3499 Stepladders, metal
 2499 Stepladders, wood
 3272 Steps, prefabricated concrete
 2517 Stereo cabinets, wood
 2822 Stereo regular elastomers
 3999 Stereographs, photographic
 3861 Stereopticons
 2794 Stereotype plates
 2794 Stereotyping for the trade
 3555 Stereotyping machines
 3999 Sterilizers, beauty and barber shop
 3551 Sterilizers, bottle
 3843 Sterilizers, dental
 3842 Sterilizers, hospital and surgical
 3443 Sterilizing chambers, metal plate
 3841 Stethoscopes and stethographs
 2913 Stew, beef and lamb
 3291 Sticks, abrasive
 3555 Sticks, printers'
 3949 Sticks: hockey, lacrosse, etc.
 2865 Stilbene dyes
 2086 Still beverages, nonalcoholic: bottled or canned
 2084 Still wines
 3443 Stills, pressure: metal plate
 3199 Stirrups, wood and metal
 2395 Stitching, decorative and novelty: for the trade
 2753 Stock certificates, engraved
 2048 Stock feeds, dry
 3079 Stock shapes, plastics
 2426 Stock, chair: hardwood—turned, shaped, or carved
 2259 Stockinette, made in knitting mills
 3842 Stockinette, surgical
 2252 Stockings, except women's and misses' full length and knee length stocking
 2251 Stockings, women's and misses' full length and knee length
 2121 Stogies
 3433 Stokers, mechanical: domestic and industrial
 3423 Stone forks (hand tools)
 3531 Stone pulverizers, portable
 3532 Stone pulverizers, stationary
 3559 Stone working machinery
 3272 Stone, cast concrete
 3281 Stone, cut and shaped
 3281 Stone, quarrying and processing of own stone products
 3423 Stonecutters' hand tools
 3291 Stones, abrasive
 3299 Stones, synthetic: for gem stones and industrial use

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STANDARD INDUSTRIAL CLASSIFICATION

- 3915 Stones: preparation of real and imitation gems for settings
 3269 Stoneware, chemical (pottery products)
 2599 Stools, factory
 2514 Stools, household: metal—padded or plain
 2511 Stools, household: wood
 2599 Stools, metal: with casters—not household or office
 2522 Stools, office: rotating—metal
 2521 Stools, office: wood
 3272 Stools, precast terrazzo
 3432 Stopcocks (plumbers' supplies)
 2499 Stoppers, cork
 3842 Stoppers, ear
 3255 Stoppers, glass house: clay
 3069 Stoppers, rubber
 3691 Storage batteries
 3631 Storage battery chargers, motor and engine generator type
 2511 Storage chests, household: wood
 3272 Storage tanks, concrete
 3443 Storage tanks, metal plate
 3573 Storage units, computer
 2599 Store fixtures, except metal and wood
 2542 Store fixtures, metal
 2541 Store fixtures, wood
 3469 Store fronts, porcelain enameled
 3442 Store fronts, prefabricated: metal, except vitreous enameled
 2541 Store fronts, prefabricated: wood
 2084 Storerooms, bonded: engaged in blending wines
 3442 Storm doors and windows, metal
 2431 Storm windows, wood
 2082 Stout (alcoholic beverage)
 3444 Stove boards, sheet metal
 3259 Stove lining, clay
 3469 Stove parts, porcelain enameled
 3444 Stove pipe and flues, sheet metal
 2842 Stove polish
 3589 Stoves, commercial
 3631 Stoves, disk
 3631 Stoves, household: cooking
 3433 Stoves, household: heating—except electric
 3421 Straight razors
 3547 Straightening machinery (rolling mill equipment)
 3674 Strain gages, solid state
 3494 Strainers, line: for use in piping systems
 3714 Strainers, oil: motor vehicle
 3569 Strainers, pipe line
 3496 Strand, uninsulated wire: made from purchased wire
 2399 Strap assemblies, tie down: aircraft—except leather
 3111 Strap leather
 3423 Strapping tools, steel
 2241 Strapping webs
 3499 Strapping, steel
 3199 Straps, except watch straps: leather
 2396 Straps, shoulder: for women's underwear—*m/ym*
 3172 Straps, watch: leather
 3999 Straw goods
 2353 Straw hats, men's and boys'
 2823 Straw, rayon: primary product
 2631 Strawboard, except building board: *mitse*
 3229 Straws, glass
 2654 Straws, soda: except glass or plastic
 3711 Street flushers (motor vehicles)
 3648 Street lighting fixtures, except traffic signals
 3612 Street lighting transformers
 3711 Street sprinklers and sweepers (motor vehicles)
 3991 Street sweeping brooms, hand and machine
 3647 Streetcar lighting fixtures
 3743 Streetcars and car equipment
 3829 Stress, strain, and flaw detecting and measuring equipment
 2211 Stretch fabrics, cotton
 2251 Stretch tights, seamless and full-fashioned
 3842 Stretchers
 2499 Stretchers, curtain: wood
 2499 Stretchers, shoe: regardless of material
 3542 Stretching machines
 3949 Striking (punching) bags
 3931 Stringed musical instruments and parts
 3999 Stringing beads for the trade
 3931 Strings, musical instrument
 3931 Strings, piano
 3949 Strings, tennis racket
 2761 Strip forms (manifold business forms)
 3316 Strip steel, cold rolled: not made in hot rolling mills
 3351 Strip, copper and copper alloy
 3356 Strip: lead, magnesium, nickel, tin, titanium, zinc, and their alloys
 3312 Strips, galvanized iron and steel
 3312 Strips, iron and steel: made in steel works or hot rolling mills

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3069 Strips, liner: rubber
 2823 Strips, rayon: primary product
 2823 Strips, viscose
 3825 Stroboscopes
 3641 Strobotrons
 3944 Strollers, baby (vehicles)
 2819 Strontium carbonate, precipitated, and oxide
 2819 Strontium nitrate
 3199 Strops, razor
 3211 Structural glass, flat
 2491 Structural lumber and timber, treated
 2439 Structural members, laminated wood: arches, trusses, timbers, etc.
 3547 Structural mills (rolling mill machinery)
 3312 Structural shapes, iron and steel
 3355 Structural shapes, rolled aluminum
 3441 Structural steel, fabricated
 3251 Structural tile, clay
 3944 Structural toy sets
 2833 Strychnine and derivatives
 3299 Stucco
 3674 Stud bases or mounts for semiconductor devices
 2515 Studio couches, on frames of any material
 3963 Studs, shirt: except precious metal and precious or semiprecious stones
 3551 Stuffers, sausage
 2411 "Stumping" for turpentine or powder manufacturing
 2411 Stumps
 3679 Styl, phonograph record cutting
 3951 Stylographic pens
 2892 Styphnic acid
 2865 Styrene
 2865 Styrene monomer
 2821 Styrene resins
 2821 Styrene-acrylonitrile resins
 2822 Styrene-butadiene rubbers (50 percent or less styrene content)
 2822 Styrene-chloroprene rubbers
 2822 Styrene-isoprene rubbers
 3531 Subgraders, construction equipment
 2819 Sublimate, corrosive
 3484 Submachine guns and parts
 3731 Submarine tenders, building and repairing
 3544 Subpresses, metalworking
 3531 Subsoiler attachments, tractor mounted
 3841 Suction therapy apparatus
 2261 Sueding cotton broad woven goods
 2262 Sueding man-made fiber and silk broad woven fabrics
 2099 Sugar grinding
 2023 Sugar of milk
 3551 Sugar plant machinery
 2063 Sugar, beet
 2087 Sugar, burnt (food color)
 2061 Sugar, cane: made from sugarcane
 2062 Sugar, cane: refined—made in refineries from purchased sugar
 2046 Sugar, corn
 2099 Sugar, industrial maple: made in plants producing maple sirup
 2062 Sugar, invert
 2099 Sugar, powdered: *mfp*
 2396 Suit and coat findings: coat fronts and linings
 2396 Suit trimmings, fabric: *mfp*
 3429 Suitcase hardware, including locks
 3079 Suitcase shells, plastics
 3161 Suitcases, regardless of material
 2211 Suiting fabrics, cotton
 2221 Suiting fabrics, man-made fiber and silk
 2231 Suitings of wool, mohair, and similar fibers
 2369 Suits and rompers, children's and infants': *mfp*
 3842 Suits, firefighting: asbestos
 2253 Suits, *misc*
 2329 Suits, wash: men's, youths', and boys'
 2363 Suits: girls' and children's, *mfp*
 2311 Suits: men's, youths', and boys'
 2337 Suits: women's, misses', and juniors'
 2833 Sulfa drugs
 2819 Sulfate of potash and potash magnesia, not produced at mines
 2819 Sulfides and sulfites
 2819 Sulfocyanides
 2833 Sulfonamides
 2869 Sulfonated naphthalene
 2843 Sulfonated oils, fats, and greases
 2819 Sulfur chloride
 2819 Sulfur dioxide
 2879 Sulfur dust (insecticide)
 2819 Sulfur hexafluoride gas
 2819 Sulfur, recovered or refined, including from sour natural gas
 2819 Sulfuric acid
 3944 Sulkies, baby (vehicles)
 2861 Sumac extract
 3851 Sun glasses and goggles

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STANDARD INDUSTRIAL CLASSIFICATION

- 2369 Sun suits: girls', children's, and infants'—*m/fpm*
 2674 Superphosphates, ammoniated and not ammoniated
 3699 Supports and filaments, for electric lamps
 3642 Supports: abdominal, ankle, arch, knee-cap, etc.
 2634 Suppositories
 2643 Surface active agents
 3622 Surface burner controls, temperature
 3553 Surfacers (woodworking machines)
 3531 Surfacers, concrete grinding
 3443 Surge tanks, metal plate
 3069 Surgeons' gloves, rubber
 3642 Surgical appliances and supplies, except medical instruments
 2211 Surgical fabrics, cotton
 3641 Surgical instruments and apparatus
 3641 Surgical knife blades and handles
 3569 Surveillance ovens, for aging and testing powder
 3611 Surveying instruments and accessories
 2499 Surveyors' stakes, wood
 2369 Suspenders
 3642 Suspensories
 3642 Sutures, absorbable and nonabsorbable
 3642 Swabs, sanitary cotton
 3599 Swage blocks
 3542 Swaging machines
 2769 Swatches and samples, mounting for the trade
 3999 Swatters, fly
 2396 Sweat bands, hat and cap
 2253 Sweat shirts, *mitse*
 3111 Sweatband leather
 2253 Sweaters and sweater coats, *mitse*
 2329 Sweaters: men's, youths', and boys'—*m/fpm*
 3625 Sweep generators
 3625 Sweep oscillators
 3569 Sweepers, carpet: except household electric vacuum sweepers
 3569 Sweepers, electric vacuum: industrial
 3635 Sweepers, electric: vacuum—household
 3711 Sweepers, street (motor vehicles)
 2642 Sweeping compounds, oil and water absorbent, clay or sawdust
 2051 Sweet yeast goods
 3569 Swimming pool filter systems (home pools)
 3648 Swimming pool lighting fixtures
 3949 Swimming pools, plastic
 2253 Swimsuits, *mitse*
 2329 Swimwear: men's, youths', and boys'—*m/fpm*
 2514 Swings, porch: metal
 2511 Swings, porch: wood
 2395 Swiss loom embroideries
 3644 Switch boxes, electric
 3643 Switch cutouts
 3613 Switchboard apparatus, except instruments
 3281 Switchboard panels, slate
 3613 Switchboards and parts, power
 3661 Switchboards, underwater: telephone and telegraph
 3999 Switches (hair)
 3613 Switches, electric power: except snap, push button, tumbler, and solenoid
 3679 Switches, electronic applications
 3622 Switches, flow actuated electrical
 3822 Switches, pneumatic positioning remote
 3462 Switches, railroad: forged—not made in rolling mills
 3674 Switches, silicon control
 3679 Switches, stepping
 3822 Switches, thermostatic
 3643 Switches: snap, tumbler, pressure, etc. (electric wiring devices)
 3613 Switchgear and switchgear accessories
 3613 Switching equipment, power
 3743 Switching locomotives and parts, electric and nonelectric
 3949 Swivels (fishing equipment)
 3421 Swords
 3829 Synchronizers, aircraft engine
 3621 Synchronous condensers and timing motors, electric
 3621 Synchros
 3825 Synchrosopes
 3559 Synthetic filament extruding machines
 3079 Synthetic food casings (including fibrous, plastics regenerated collagen)
 3079 Synthetic resin finished products: molded, cast, and laminated
 3299 Synthetic stones, for gem stones and industrial use
 3069 Syringes, fountain: rubber
 3641 Syringes, hypodermic

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- 3611 T-squares (drafting)
 2253 T-shirts, *mitse*
 2321 T-shirts: men's, youths', and boys'—*m/fpm*

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3914 Table and kitchen cutlery: silver, silver plated, and stainless steel
 3269 Table articles, coarse earthenware
 3263 Table articles, fine earthenware (white-ware)
 3262 Table articles, vitreous china
 2211 Table cover fabrics, cotton
 2292 Table covers, lace
 3914 Table cutlery, all metal
 3421 Table cutlery, except all metal
 2211 Table damask, cotton
 3645 Table lamps
 2392 Table mats, leatherette
 2079 Table oils
 2541 Table or counter tops, plastic laminated
 3292 Table pads and padding, asbestos
 2291 Table pads and padding, felt: except woven
 2392 Table pads and padding: except asbestos, felt, rattan, reed, and willow
 2499 Table pads: rattan, reed, and willow
 2392 Table scarfs, *mfp*
 2426 Table slides, for extension tables: wood
 3231 Table tops, made from purchased glass
 3281 Table tops, marble
 3469 Table tops, porcelain enameled
 2392 Tablecloths, *mfp*
 2392 Tablecloths, plastic
 2514 Tables, household: metal
 2511 Tables, household: wood
 3537 Tables, lift: hydraulic
 2522 Tables, office: metal
 2521 Tables, office: wood
 3841 Tables, operating
 3545 Tables, rotary
 3599 Tables, sludge
 3811 Tables, work: laboratory
 3949 Tables: billiard, pool, bagatelle, and ping pong
 2648 Tablets and parts, book and writing: *mfp*
 3499 Tablets, bronze
 2834 Tablets, pharmaceutical
 3262 Tableware, commercial: vitreous china
 3229 Tableware, glass and glass ceramic
 3263 Tableware, household and commercial: semivitreous
 3079 Tableware, plastics
 2645 Tabulating cards, printed or unprinted: die-cut from purchased paperboard
 3573 Tabulating machines
 3825 Tachometer generators
 3824 Tachometer, centrifugal
 2869 Tackifiers, organic
 3429 Tackle blocks, metal
 2499 Tackle blocks, wood
 3949 Tackle, fishing: except nets, seines, and line
 3399 Tacks, brass and other nonferrous metal and wire
 3315 Tacks, steel: wire or cut
 2221 Taffetas
 3811 Taffrail logs
 2621 Tagboard, made in paper mills
 2631 Tagboard, made in paperboard mills
 2752 Tags, lithographed
 2649 Tags, paper: unprinted—*mfp*
 2751 Tags: printing and embossing only
 3647 Tail lights, motor vehicle
 2311 Tailored dress and sport coats: men's and boys'
 3952 Tailors' chalk
 2499 Tailors' pressing blocks, wood
 3421 Tailors' scissors
 3421 Tailors' shears, hand
 3295 Talc, ground or otherwise treated
 2844 Talcum powders
 2861 Tall oil, except skimmings
 2851 Tallate driers
 2076 Tallow, vegetable
 3824 Tally counters
 3824 Tallying meters: except electrical instruments, watches, clocks
 2032 Tamales, canned
 3531 Tampers, powered
 3531 Tamping equipment, rail
 3489 Tampions, for guns over 30 mm. (or over 1.18 inch)
 3489 Tank artillery
 3255 Tank blocks, glass house: clay
 3795 Tank components, specialized: military
 3519 Tank engines and engine parts, military
 3743 Tank freight cars and car equipment
 3259 Tank liner brick, vitrified clay
 3795 Tank recovery vehicles
 3443 Tank towers, metal plate
 3824 Tank truck meters
 3731 Tankers (large craft), building and repairing
 3443 Tanks for tank trucks, metal plate
 3272 Tanks, concrete
 3261 Tanks, flush: vitreous china
 3728 Tanks, fuel: aircraft
 3714 Tanks, gas: motor vehicle
 3443 Tanks, liquid oxygen: metal plate
 3443 Tanks, metal plate: lined

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STANDARD INDUSTRIAL CLASSIFICATION

- | | |
|---|---|
| 3795 Tanks, military: including factory re-building | 2861 Tar and tar oils, products of wood distillation |
| 3585 Tanks, soda water | 2911 Tar or residuum, produced in petroleum refineries |
| 3443 Tanks, standard and custom fabricated: metal plate—made in boiler shops | 2661 Tar paper, building and roofing: <i>misc</i> |
| 2449 Tanks, wood: coopered | 2641 Tar paper, except building or roofing: <i>m/fpm</i> |
| 3861 Tanks: photographic developing, fixing, and washing | 2952 Tar paper, roofing: <i>m/fpm</i> |
| 3111 Tanneries, leather | 3313 Tar, derived from chemical recovery coke ovens |
| 3559 Tannery machines | 2865 Tar, product of coal tar distillation |
| 2869 Tannic acid | 3728 Target drones |
| 2819 Tanning agents, synthetic inorganic | 3499 Target drones for use by ships, under-water and above water: metal |
| 2869 Tanning agents, synthetic organic | 3949 Target shooting equipment, except fire-arms and ammunition |
| 3999 Tanning and currying furs | 3662 Target signals, synthetic: to operate radar receivers and repeaters |
| 2861 Tanning extracts and materials, natural | 3949 Targets, archery and rifle shooting |
| 3339 Tantalum refining | 3949 Targets, clay |
| 3999 Tape measures | 3728 Targets, trailer type: aircraft |
| 3573 Tape recorders for data computers | 2211 Tariatan, cotton |
| 3573 Tape transport systems for electronic computers | 2394 Tarpaulins, fabric: <i>m/fpm</i> |
| 3573 Tape transports, magnetic | 2869 Tartaric acid and metallic salts |
| 3842 Tape, adhesive: medicated or nonmedi-cated | 2869 Tartrates |
| 3292 Tape, asbestos | 2234 Tatting thread: cotton, silk, and man-made fiber |
| 2841 Tape, cellophane adhesive: <i>m/fpm</i> | 3711 Taxicabs |
| 3069 Tape, friction: rubber | 3824 Taximeters |
| 2641 Tape, gummed: cloth and paper base— <i>m/fpm</i> | 2393 Tea bags, fabric: <i>m/fpm</i> |
| 3964 Tape, hook-and-eye and snap fastener | 2099 Tea blending |
| 3679 Tape, magnetic recording, including paper tape | 2514 Tea wagons, metal |
| 3652 Tape, magnetic: pre-recorded | 2511 Tea wagons, wood |
| 2641 Tape, masking: <i>m/fpm</i> | 3634 Teakettles, electric |
| 2641 Tape, pressure sensitive: except rubber backed | 3469 Teakettles, except electric: metal |
| 2649 Tape, telegraph: paper— <i>m/fpm</i> | 3229 Teakettles, glass and glass ceramic |
| 2295 Tape, varnished: plastic, and other coated (except magnetic)— <i>m/fpm</i> | 2869 Tear gas |
| 2241 Tapes, fabric | 3999 Tear gas devices and equipment |
| 3811 Tapes, surveyors' | 2261 Teaseling cotton broad woven goods |
| 2211 Tapestry fabrics, cotton | 2262 Teaseling man-made fiber and silk broad woven fabrics |
| 2221 Tapestry fabrics, man-made fiber and silk | 3229 Technical glassware and glass products, pressed or blown |
| 2046 Tapioca | 3231 Technical glassware, <i>m/fpm</i> |
| 3541 Tapping machines | 2741 Technical manuals and papers: publish-ing and printing, or publishing only |
| 3643 Taps, current: attachment plug and screw shell types | 3843 Teeth, artificial: not made in dental lab-oratories |
| 3545 Taps, machine tool | 3531 Teeth, bucket and scarifier |
| 3131 Taps, shoe: regardless of material | 3069 Teething rings, rubber |
| 2821 Tar acid resins | 3661 Telegraph and telephone carrier and re-peater equipment |
| 2951 Tar and asphalt mixtures for paving, not made in petroleum refineries | |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3661 Telegraph office switching equipment
 3661 Telegraph station equipment and parts, wire
 2649 Telegraph tape, paper: *mfp*
 3663 Telemetering equipment, electronic
 3823 Telemetering instruments, industrial process type
 2542 Telephone booths, metal
 2541 Telephone booths, wood
 3661 Telephone central office equipment, dial and manual
 3661 Telephone dialing devices, automatic
 2754 Telephone directories: gravure printing (not publishing)
 2751 Telephone directories: letterpress printing (not publishing)
 2741 Telephone directories: publishing and printing, or publishing only
 3661 Telephone sets, all types
 2511 Telephone stands, wood
 3661 Telephone station equipment and parts, wire
 3661 Telephones, sound powered (no battery)
 3661 Telephones, underwater
 3832 Telescopes: elbow, panoramic, sighting, fire control, etc.
 3832 Telescopic sights
 2649 Teletypewriter paper, rolls with carbon: *mfp*
 3661 Teletypewriters
 3469 Television and radio chassis: stamped metal
 3662 Television antennas (transmitting) and ground equipment
 2519 Television cabinets, plastic
 2517 Television cabinets, wood
 3662 Television closed circuit equipment
 3662 Television monitors
 3651 Television receiving sets
 3672 Television receiving type tubes, cathode ray
 3441 Television towers
 3662 Television transmitting apparatus, except tubes
 3661 Telewriters
 3339 Tellurium refining, primary
 3822 Temperature controls, automatic: residential and commercial types
 3823 Temperature instruments: industrial process type, except glass and bimetal
 3822 Temperature sensors for motor windings
 3829 Temperature sensors, except industrial process and aircraft type
 3569 Temperature testing chambers
 3211 Tempered glass, *mitc*
 3231 Tempered glass, made from purchased glass
 3398 Tempering of metal for the trade
 3811 Templates, drafting
 3851 Temples and fronts, ophthalmic
 3732 Tenders (small motor craft), building and repairing
 3944 Tenders, baby (vehicles)
 3743 Tenders, locomotive
 3731 Tenders: large craft building and repairing
 3949 Tennis goods: balls, frames, rackets, etc.
 2253 Tennis shirts, *mitc*
 3553 Tenoners (woodworking machines)
 3829 Tensile strength testing equipment
 2499 Tent poles, wood
 3792 Tent-type camping trailers
 2211 Tentage, *mitc*
 2394 Tents, *mfp*
 3644 Terminal boards
 3643 Terminals and connectors for electrical devices
 3812 Terneplate
 3312 Ternes, iron and steel: long or short
 2869 Terpeneol
 3259 Terra cotta, architectural: clay
 3272 Terrazzo products, precast
 2211 Terry woven fabrics, cotton
 2869 Tert-butylated bis (p-phenoxyphenyl) ether fluid
 3825 Test equipment for electronic and electrical circuits and equipment
 3423 Test plugs: plumbers' hand tools
 3825 Test sets, ignition harness
 3231 Test tubes, made from purchased glass
 3829 Testers for checking hydraulic controls on aircraft
 3551 Testers, milk
 3569 Testing chambers: for altitude, temperature, ordnance, power, etc.
 3829 Testing equipment: abrasion, shearing strength, tensile strength, torsion
 2869 Tetrachloroethylene
 2869 Tetraethyl lead
 2892 Tetryl (explosive)
 2621 Text paper
 2843 Textile finishing agents
 3552 Textile finishing machinery: bleaching, dyeing, mercerizing, and printing
 3229 Textile glass fibers
 3269 Textile guides, porcelain

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STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|--|------|--|
| 3199 | Textile leathers: apron picker leather, mill strapping | 3494 | Thermostatic traps, heating |
| 3552 | Textile machinery | 3822 | Thermostats |
| 3552 | Textile machinery parts | 3679 | Thick film circuits |
| 3953 | Textile marking stamps, hand | 3829 | Thickness gauging instruments, ultrasonic |
| 2211 | Textile mills, broad woven cotton | 3259 | Thimbles, chimney: clay |
| 2221 | Textile mills, broad woven: silk, and man-made fiber including glass | 3429 | Thimbles, wire rope |
| 2241 | Textile mills, narrow woven: fibers including glass | 3674 | Thin film circuits |
| 2299 | Textile mills: linen, jute, hemp, and ramie yarn, thread, and fabric | 2521 | Thin paper, <i>mitse</i> |
| 3552 | Textile printing machines | 2943 | Thin water (admixture) |
| 2848 | Textile processing assistants | 2851 | Thinner, lacquer |
| 2655 | Textile reels, fiber: <i>m/fpm</i> | 2819 | Thiocyanates, inorganic |
| 2843 | Textile scouring compounds and wetting agents | 2879 | Thiocyanates, organic (formulated) |
| 2841 | Textile soap | 2869 | Thioglycolic acid, for permanent wave lotions |
| 2655 | Textile spinning bobbins, fiber (metal end or all fiber): <i>m/fpm</i> | 2822 | Thiol rubbers |
| 3552 | Textile turnings and shapes, wood | 3714 | Third axle attachments or six-wheel units for motor vehicles |
| 2221 | Textile warping, on a contract basis | 2035 | Thousand island dressing |
| 3292 | Textiles, asbestos: except packing | 3545 | Thread cutting dies |
| 2297 | Textiles, bonded fiber: except felt | 3545 | Thread gauges (machinists' precision tools) |
| 2282 | Textured yarns | 3552 | Thread making machines (spinning machinery) |
| 2531 | Theater furniture | 3542 | Thread rolling machines |
| 2389 | Theatrical costumes | 3292 | Thread, asbestos |
| 3999 | Theatrical scenery | 2284 | Thread, except linen or wool: bleaching, dyeing, and finishing |
| 2833 | Theobromine | 2241 | Thread, fabric covered rubber |
| 3811 | Theodolites (surveying equipment) | 3069 | Thread, rubber: except fabric covered |
| 3693 | Therapeutic X-ray apparatus and tubes: for medical, industrial, research | 2284 | Thread, except linen, wool, mohair, or similar animal fibers |
| 3823 | Thermal conductivity instruments, industrial process type | 2299 | Thread: linen, hemp, and ramie |
| 3674 | Thermionic devices, solid state | 2283 | Thread: wool, mohair, or similar animal fiber |
| 3676 | Thermistors, except temperature sensors | 3541 | Threading machines (machine tools) |
| 3823 | Thermistors, industrial process type | 3545 | Threading tools (machine tool accessories) |
| 3399 | Thermite | 3272 | Thresholds, precast terrazzo |
| 3629 | Thermo-electric generators | 2282 | Throwing, winding, or spooling of filament yarn: silk and man-made fiber |
| 3829 | Thermocouples, except industrial process and aircraft type | 3829 | Thrust power indicators, aircraft engine |
| 3823 | Thermocouples, industrial process type | 2834 | Thyroid preparations |
| 3822 | Thermocouples, vacuum: glass | 3579 | Ticket counting machines |
| 3494 | Thermodynamic steam traps | 2752 | Tickets, lithographed |
| 3674 | Thermoelectric devices, solid state | 2649 | Tickets, pin: paper— <i>m/fpm</i> |
| 2751 | Thermography | 2754 | Tickets: gravure printing |
| 3829 | Thermomagnetic oxygen analyzer | 2751 | Tickets: letterpress and screen printing |
| 3069 | Thermometer cases, rubber | 2211 | Tickings, <i>mitse</i> |
| 3823 | Thermometers, filled system: industrial process type | 3312 | Tie plates, iron and steel |
| 3829 | Thermometers, liquid-in-glass and bimetal type | 3714 | Tie rods, motor vehicle |
| 2641 | Thermoplastic coated paper, <i>m/fpm</i> | 2241 | Tie tapes, woven or braided |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2449 Tierces (cooperage)
 3496 Ties, bale: made from purchased wire
 3599 Ties, form: metal
 2323 Ties, handsewn: *m/psm*
 2491 Ties, railroad cross bridge and switch: treated
 2411 Ties, railroad: hewn
 2421 Ties, railroad: sawed
 3559 Tile making machines
 3296 Tile, acoustical: mineral wool
 3253 Tile, ceramic wall and floor: glazed and unglazed
 3253 Tile, clay floor and wall: enameled
 3255 Tile, clay refractory
 2499 Tile, cork
 3469 Tile, floor and wall: stamped metal
 3292 Tile, floor: asphalt
 3996 Tile, floor: supported plastic
 3275 Tile, gypsum
 3079 Tile, plastics: unsupported
 3272 Tile, precast terrazzo or concrete
 3259 Tile, roofing and drain: clay
 3069 Tile, rubber
 3299 Tile, sand lime
 3259 Tile, sewer: clay
 3292 Tile, vinyl asbestos
 2649 Tile, wall: enameled masonite—*m/psm*
 2661 Tile, wall: fiber board—*mtse*
 2449 Till baskets, veneer and splint
 2411 Timber (product of logging camps)
 2491 Timber, structural: treated
 2411 Timbers, mine: hewn
 2439 Timbers, structural: laminated lumber
 3579 Time clocks and time recording devices
 3825 Time code generators
 3823 Time cycle and program controllers, industrial process type
 3662 Time decoders
 3811 Time interval measuring equipment, electric (laboratory type)
 3429 Time locks
 3811 Time measuring and counting equipment, electric (laboratory type)
 3822 Time program controls, air conditioning systems
 2645 Time recording cards, die-cut from purchased paperboard
 3579 Time stamps, containing clock mechanisms
 3613 Time switches, electrical switchgear apparatus
 3873 Timers for industrial use, clockwork mechanism only
 3622 Timing devices, electronic
 3621 Timing motors, synchronous: electric
 3356 Tin and tin alloy bars, pipe, rods, sheets, strip, and tubing
 3339 Tin base alloys, primary
 3411 Tin cans
 2819 Tin chloride
 2819 Tin compounds, inorganic
 3497 Tin foil, not made in rolling mills
 3812 Tin free steel
 2819 Tin oxide
 3312 Tin plate
 3339 Tin refining, primary
 3356 Tin rolling and drawing
 2819 Tin salts
 3341 Tin smelting and refining, secondary
 2834 Tinctures, pharmaceutical
 3423 Tinnern's hand tools, except snips
 3421 Tinnern's snips
 3999 Tinsel
 2899 Tints and dyes, household
 2396 Tip printing and stamping on fabric
 3181 Tips, shoe: regardless of material
 3496 Tire chains, made from purchased wire
 2296 Tire cord
 2399 Tire covers, *m/psm*
 2296 Tire fabric
 3559 Tire grooving machines
 3563 Tire inflators, hand or compressor operated
 3559 Tire retreading machinery and equipment
 3011 Tire sundries and tire repair materials, rubber
 3714 Tire valve cores
 3011 Tires, cushion or solid rubber
 3079 Tires, plastics
 **** Tires, rebuilt or retreaded—see nonmanufacturing
 3011 Tiring, continuous lengths: rubber, with or without metal core
 3079 Tissue dispensers, plastics
 2621 Tissue paper, *mtse*
 2647 Tissues, cleansing: *m/psm*
 3264 Titania porcelain insulators
 3356 Titanium and titanium alloy bars, rods, billets, sheets, strip, and tubing
 3369 Titanium and titanium alloy castings
 3463 Titanium forgings, not made in hot rolling mills

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STANDARD INDUSTRIAL CLASSIFICATION

3356	Titanium from sponge	3861	Toners, prepared photographic: not made in chemical plants
3339	Titanium metal sponge and granules	3423	Tongs, oyster
2816	Titanium pigments	3842	Tongue depressors
3861	Titlers, motion picture film	3131	Tongues, boot and shoe: leather
3832	Titrometers	2844	Tonics, hair
2892	TNT (trinitrotoluene)	3841	Tonometers, medical
3634	Toasters, household: electric	3469	Tool boxes, stamped metal
2211	Tobacco cloths, <i>mitse</i>	2441	Tool chests, wood
3523	Tobacco curers	3079	Tool handles, plastics
3523	Tobacco harvesters	2499	Tool handles, wood: turned and shaped
2421	Tobacco hogshead stock	3545	Tool holders
2449	Tobacco hogsheads	2599	Tool stands, factory
3229	Tobacco jars, glass	3312	Tool steel
3069	Tobacco pipe mouthpieces, hard rubber	3545	Tools and accessories for machine tools
3999	Tobacco pipes, pipestems, and bits: except hard rubber	3423	Tools and equipment for use with sporting arms
3172	Tobacco pouches, regardless of material	3843	Tools, dentists'
3559	Tobacco products machinery	3423	Tools, edge: woodworking—augers, bits, gimlets, countersinks, etc.
2141	Tobacco thrashing (mechanical stemming)	3423	Tools, hand: except power driven tools and saws
2141	Tobacco, stemming and redrying of	3546	Tools, hand: power driven—woodworking or metalworking
2131	Tobacco: chewing, smoking, and snuff	3541	Tools, machine: metal cutting types
3949	Toboggans	3533	Tools: drilling, etc.—for artesian, gas, and oil wells
3131	Toe caps, leather or metal	2844	Tooth pastes and powders
3452	Toggle bolts	3634	Toothbrushes, electric
3991	Toilet brushes	3991	Toothbrushes, except electric
2844	Toilet creams, powders, and waters	2499	Toothpicks, wood
3261	Toilet fixtures, vitreous china	3069	Top lift sheets, rubber
3431	Toilet fixtures: enameled iron, cast iron, and pressed metal	3131	Top lifts, boot and shoe
3172	Toilet kits and cases, fitted or unfitted: regardless of material	3069	Top roll covering, for textile mill machinery: rubber
2647	Toilet paper, <i>m/p</i> m	2311	Topcoats: men's, youths', and boys'
2844	Toilet preparations	3465	Tops, automobile: stamped metal
2499	Toilet seats, regardless of material	2645	Tops, bottle: die-cut from purchased paper or paperboard
2621	Toilet tissue stock	3259	Tops, chimney: clay
3914	Toilet ware: silver, nickel silver, pewter, and plated	2299	Tops, combing and converting
3829	Toll booths, automatic	3466	Tops, jar: stamped metal
2865	Toluene, product of coal tar distillation	2299	Tops, man-made fiber
2865	Toluidines	3714	Tops, motor vehicle: except stamped metal
2865	Toluol, product of coal tar distillation	3079	Tops, plastics (dispenser, shaker, etc.)
3523	Tomato harvesters	3713	Tops, truck
2033	Tomato juice and cocktails, bottled and canned	2899	Torches (fireworks)
2033	Tomato paste	3489	Torpedo tubes (ordnance)
2033	Tomato puree	3483	Torpedoes and parts (ordnance)
2033	Tomato sauce	2899	Torpedoes, railroad
3281	Tombstones, cut stone: not including only finishing or lettering to order	2892	Torpedoes, well shooting (explosives)
3272	Tombstones, precast terrazzo or concrete	3566	Torque converters, except motor vehicle
2865	Toners (reduced or full strength organic colors)		

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3621 Torque motors, electric
 3493 Torsion bar springs
 3829 Torsion testing equipment
 2032 Tortillas, canned
 2099 Tortillas, in bulk
 3824 Totalizing meters, consumption registering, except aircraft
 3999 Toupees
 3728 Tow targets
 2299 Tow to top mills
 3731 Towboats, building and repairing
 3261 Towel bar holders, vitreous china and earthenware
 2641 Towelettes, premoistened, *mfp*
 2621 Toweling paper, *misc*
 2211 Towels and toweling, cotton: made in weaving mills
 2299 Towels and towelings, linen and linen-and-cotton mixtures: *misc*
 2392 Towels, fabric and nonwoven textiles: *mfp*
 2259 Towels, made in knitting mills
 2647 Towels, paper: *mfp*
 2499 Towers, cooling: wood or wood and sheet metal combination
 3441 Towers, radio and television
 3443 Towers, tank: metal plate
 3441 Towers, transmission
 3523 Towers, windmill
 3443 Towers: bubble, cooling, fractionating—metal plate
 2831 Toxins
 2831 Toxoids
 3612 Toy transformers
 3942 Toys, doll
 3069 Toys, rubber
 3942 Toys, stuffed
 3944 Toys: except dolls, children's vehicles, and rubber toys
 2879 Trace elements (agricultural chemicals)
 3483 Tracer igniters for ammunition over 80 mm. (or over 1.18 inch)
 3952 Tracing cloth (drafting material)
 2211 Tracing cloth, cotton
 3949 Track and field athletic equipment, except apparel
 3743 Trackless trolley buses
 3842 Traction apparatus
 3531 Tractors, contractors' off-highway
 3531 Tractors, crawler
 3523 Tractors, farm
 3524 Tractors, garden
 3537 Tractors, industrial: for use in plants, depots, docks, and terminals
 3531 Tractors, tracklaying
 3711 Tractors, truck: for highway use
 3523 Tractors, wheel: farm type
 2789 Trade binding services
 2721 Trade journals, publishing of
 2752 Trading stamps, lithographed
 2754 Trading stamps: gravure printing
 2751 Trading stamps: letterpress and screen printing
 3662 Traffic signals, electric
 3792 Trailer coaches, automobile
 3523 Trailers and wagons, farm
 3523 Trailers for farm tractors
 3715 Trailers or vans for transporting horses
 3792 Trailers, camping
 3799 Trailers, except house and recreational: for automobiles
 3792 Trailers, house: except as permanent dwellings
 3715 Trailers, motor truck
 3537 Trailers, truck: for use in plants, depots, docks, and terminals
 3743 Train cars and equipment, freight or passenger
 3728 Training aids, aircraft: except electronic
 3662 Training devices, electronic
 3944 Trains and equipment, toy: electric and mechanical
 2834 Tranquilizers and mental drug preparations
 3825 Transducers for volts, amperes, watts, vars, frequency, and power factor
 3679 Transducers, electrical
 3829 Transducers, pressure
 2641 Transfer paper, gold and silver: *mfp*
 2752 Transferring designs (lithographing)
 2752 Transfers, decalomania and dry: lithographed
 3999 Transformations, hair
 3623 Transformers (separate), for arc welders
 3612 Transformers, electric power
 3677 Transformers, electronic types
 3612 Transformers, for electronic meters
 3612 Transformers, ignition: for use on domestic fuel burners
 3612 Transformers, instrument: except portable
 3825 Transformers, instrument: portable
 3612 Transformers, reactor
 3674 Transistors

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STANDARD INDUSTRIAL CLASSIFICATION

3273	Transit-mixed concrete	3069	Treads, stair: rubber
3311	Transits, surveyors'	3999	Treating clock and watch dials with luminous material
3612	Transmission and distribution voltage regulators	2491	Treating wood products with creosote or other preservatives
3199	Transmission belting, leather	3523	Tree shakers (nuts, soft fruits, citrus)
3041	Transmission belting, rubber	2431	Trellises, wood
2992	Transmission fluid, hydramatic	2491	Trestles, wood: treated
3714	Transmission housings and parts, motor vehicle	2823	Triacetate fibers
3441	Transmission towers	2369	Trichloroethylene
3723	Transmissions, aircraft	2369	Trichloroethylene stabilized, degreasing
3714	Transmissions, motor vehicle	2369	Trichlorophenoxyacetic acid
3823	Transmitters of process variables, standard signal conversion	2369	Trichlorotrifluoroethane tetrachlorodifluoroethane isopropyl alcohol
3662	Transmitting apparatus, radio and television: except tubes	2253	Tricot fabrics
3673	Transmitting electron tubes	2369	Tricresyl phosphate
3523	Transplanters	3944	Tricycles
3662	Transponders	2369	Tridecyl alcohol
3731	Transport vessels, passenger and troop: building and repairing	3465	Trim and body parts, automobile: stamped metal
2754	Transportation schedules, gravure print ing	3442	Trim and molding, except automobile: metal and metal covered
2752	Transportation schedules, lithographed	2431	Trim, wood
2751	Transportation schedules: letterpress and screen printing	2369	Trimethyltrithiophosphite (rocket propellants)
3949	Trap racks (clay targets)	3524	Trimmers, hedge: electric
3496	Traps, animal and fish: made from purchased wire	3421	Trimmers, hedge: except electric
3931	Traps, drummers'	3559	Trimmers, wallpaper
3494	Traps, steam	2291	Trimming felts, except woven
3432	Traps, water	3911	Trimnings for canes, umbrellas, etc.—precious metal
3639	Trash compactors, household	3999	Trimnings for canes, umbrellas, etc.: except precious metal
3443	Trash racks, metal plate	2396	Trimnings, fabric: auto, furniture, millinery, dress, coat, and suit— <i>m/psm</i>
3161	Traveling bags, regardless of material	3962	Trimnings, feather
3673	Traveling wave tubes	2371	Trimnings, fur
2298	Trawl twine	2396	Trimnings, hat: men's
3731	Trawlers, building and repairing	2241	Trimnings, textile: <i>mitse</i>
2599	Tray trucks, restaurant equipment	3131	Trimnings, shoe: leather
2441	Trays, carrier: wood	3429	Trimnings, trunk: metal
3229	Trays, glass	2892	Trinitrotoluene (TNT)
3272	Trays, laundry: concrete	2013	Tripe, <i>m/psm</i>
3496	Trays, made from purchased wire	2369	Triphenyl phosphate
3861	Trays, photographic printing and processing	3832	Triplet magnifying instruments, optical
3079	Trays, plastics	3861	Tripods, camera and projector
3069	Trays, rubber	3291	Tripoli
3914	Trays: silver, nickel silver, pewter, stainless steel, and plated	3612	Tripping transformers
2499	Trays: wood, wicker, and bagasse	3341	Trocars
3011	Tread rubber (camelback)	3743	Trolley bus poles
3446	Treads, stair: fabricated metal	3743	Trolley buses, trackless
		3643	Trolley line material, overhead

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3743 Trolley retrievers
 3743 Trolley shoes
 3931 Trombones and parts
 3499 Trophies, metal: except silver, nickel silver, pewter, and plated
 3914 Trophies: silver, nickel silver, pewter, and plated
 2499 Trophy bases, wood
 3699 Trouble lights, made from purchased materials
 3443 Troughs, industrial: metal plate
 3523 Troughs, water
 3634 Trouser pressers, electric
 2231 Trouserings of wool, mohair, and similar fibers
 2211 Trouserings, cotton
 2327 Trousers, dress (separate): men's, youths', and boys'
 3423 Trowels
 3713 Truck beds
 3713 Truck bodies, motor vehicle
 3713 Truck cabs, for motor vehicles
 3792 Truck campers (slide-in campers)
 3622 Truck controls, industrial battery
 3713 Truck tops
 3711 Truck tractors for highway use
 3715 Truck trailers
 3537 Truck trailers, for use in plants, depots, docks, and terminals
 3537 Trucks, industrial (except mining) for freight, baggage, etc.
 3711 Trucks, motor: except off-highway
 3531 Trucks, off-highway: heavy duty motor
 3931 Trumpets and parts
 3429 Trunk hardware, including locks
 2441 Trunk slats, wood
 3161 Trunks, regardless of material
 3443 Truss plates, metal
 2439 Trusses, laminated lumber
 3842 Trusses: orthopedic and surgical
 3494 Tube and hose fittings and assemblies, fluid power
 3354 Tube blooms, aluminum: extruded
 3498 Tube fabricating (contract bending and shaping)
 3469 Tube fins, stamped metal
 3679 Tube retainers, electronic
 3312 Tube rounds
 3679 Tube spacers, mica
 3825 Tube testers
 3679 Tube transformer assemblies used in firing electronic tubes
 3354 Tube, aluminum: extruded or drawn
 2831 Tuberculins
 3673 Tubes for operating above the X-ray spectrum (with shorter wavelength)
 3673 Tubes, cathode ray: except television receiving type
 3672 Tubes, cathode ray: television receiving type
 3499 Tubes, collapsible: for viscous products—tin, lead, and aluminum
 3641 Tubes, electric light
 3671 Tubes, electron: radio and television receiving—except cathode ray tubes
 3673 Tubes, electron: transmitting, industrial, and special purpose
 2655 Tubes, fiber or paper (with or without metal ends): *mfp*
 2655 Tubes, for chemical and electrical uses: impregnated paper or fiber—*mfp*
 3069 Tubes, hard rubber
 3011 Tubes, inner: airplane, automobile, bicycle, motorcycle, and tractor
 3312 Tubes, iron and steel: made in steel works or rolling mills
 3673 Tubes, klystron
 3079 Tubes, plastics
 3264 Tubes, porcelain
 3317 Tubes, seamless steel: *mfp*
 3672 Tubes, television receiving type: cathode ray
 3353 Tubes, welded: aluminum
 3317 Tubes, wrought: welded, lock joint, and heavy riveted—*mfp*
 3693 Tubes, X-ray
 3299 Tubing for electrical purposes, quartz
 3292 Tubing, asbestos
 3351 Tubing, copper and copper alloy
 3599 Tubing, flexible metallic
 3229 Tubing, glass
 3317 Tubing, mechanical and hypodermic sizes: cold drawn stainless steel—*mfp*
 2211 Tubing, pillow: *mitse*
 3079 Tubing, plastics
 3069 Tubing, rubber
 2211 Tubing, seamless: cotton
 3312 Tubing, seamless: steel
 2295 Tubing, textile: varnished
 3312 Tubing, wrought: made in steel works or rolling mills
 3356 Tubing: lead, magnesium, nickel, titanium, zinc, and their alloys

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STANDARD INDUSTRIAL CLASSIFICATION

3431 Tubs, laundry and bath : enameled iron, cast iron, and pressed metal

3879 Tubs, plastics

2449 Tubs, wood : coopered

2395 Tucking, for the trade

3552 Tufting machines

3781 Tugboats, building and repairing

3229 Tumblers, glass

3079 Tumblers, plastics

3471 Tumbling (cleaning and polishing) of machine parts, for the trade

2001 Tuna fish, canned

3651 Tuners, FM and AM

2076 Tung oil

3356 Tungsten basic shapes

3291 Tungsten carbide abrasives

3674 Tunnel diodes

3537 Tunnel kiln cars

3443 Tunnel lining, metal plate

3443 Tunnels, vacuum : metal plate

3443 Tunnels, wind

3323 Turbidity instruments, industrial process type

3332 Turbidimeters

3323 Turbine flow meters, industrial process type

3511 Turbine generator set units, complete : steam, gas, and hydraulic

3324 Turbine meters, consumption registering

3724 Turbines, aircraft type

3511 Turbines : steam, hydraulic, and gas—except aircraft type

3564 Turbo-blowers, industrial

3511 Turbo-generators

3724 Turbo-superchargers, aircraft

2843 Turkey red oil

2016 Turkeys : slaughtering, dressing, and packing for the wholesale trade

3429 Turnbuckles

2499 Turned and carved wood (except furniture)

3541 Turning machines, metal working (lathes)

2426 Turnings, furniture : wood

3829 Turnstiles, equipped with counting mechanisms

3311 Turntable indicator testers

3651 Turntables, for phonographs

2861 Turpentine, produced by distillation of pine gum or pine wood

3541 Turret lathes

3728 Turret test fixtures, aircraft

3728 Turrets and turret drives, aircraft

3489 Turrets, gun: for artillery over 30 mm.
(or over 1.18 inch)

2311 Tuxedos

8229 TV tube blanks, glass

2211 Twills, cotton

2231 Twills, man-made fiber

2298 Twine

2282 Twisting yarn: silk and man-made fiber
continuous filament

2283 Twisting yarn: wool, mohair, or similar
animal fiber

3555 Type cases, printers'

3555 Type casting, founding, and melting
machines

3009 Type, rubber

3555 Type: lead, steel, brass, copper faced, etc.

3555 Typesetting machines: intertypes, lino-
types, monotypes, etc.

2791 Typesetting, for the printing trade

2211 Typewriter ribbon cloth

3965 Typewriter ribbons, cloth or paper

3572 Typewriters and parts

3572 Typewriters, including coded media and
specialized composing typewriters

2791 Typographic composition

3555 Typographic numbering machines

II

3931	Ukuleles and parts
3648	Ultra-violet lamp fixtures
3641	Ultra-violet lamps
3674	Ultra-violet sensors, solid state
2816	Ultramarine pigment
3541	Ultrasonic assisted grinding machines (metalworking)
3662	Ultrasonic cleaning equipment
3843	Ultrasonic dental equipment
3662	Ultrasonic generators sold separately for inclusion in tools and equipment
3841	Ultrasonic medical equipment
3541	Ultrasonic metal cutting machine tools
3829	Ultrasonic testing equipment
3662	Ultrasonic welding machines and equip- ment
3542	Ultrasonically assisted metal forming machines
2816	Umbers
2211	Umbrella cloth, cotton
3911	Umbrella handles and trimmings, pre- cious metal
3999	Umbrellas and parts, except precious metal

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3999 Umbrellas: beach, garden, and wagon
 2851 Undercoatings, paint
 3648 Underwater lighting fixtures
 3662 Underwater sound equipment
 2211 Underwear fabrics, except knit: cotton
 2221 Underwear fabrics, except knit: man-made fiber and silk
 2254 Underwear, *mitse*
 2322 Underwear: men's, youths', and boys'—*mfp*
 2341 Underwear: women's, misses', children's, and infants'—*mfp*
 2352 Uniform hats and caps, cloth: men's, boys', and women's
 2321 Uniform shirts
 2329 Uniforms, athletic and gymnasium: men's, youths', and boys'
 2339 Uniforms, athletic: women's, misses', and juniors'
 2337 Uniforms, except athletic: women's, misses', and juniors'
 2311 Uniforms, men's: suits, coats, and overcoats
 2254 Union suits, *mitse*
 3433 Unit heaters, domestic: except electric
 3634 Unit heaters, household: electric
 2761 Unit sets (manifold business forms)
 3711 Universal carriers, military
 3568 Universal joints, except motor vehicle
 3714 Universal joints, motor vehicle
 2512 Upholstered furniture, household: on wood frames
 2211 Upholstery fabrics, cotton
 2221 Upholstery fabrics, man-made fiber and silk
 2231 Upholstery fabrics, wool
 2293 Upholstery filling, except excelsior
 3111 Upholstery leather
 3495 Upholstery springs, unassembled: made from purchased wire
 3111 Upper leather
 3131 Uppers (shoe cut stock)
 3462 Upset forgings, iron and steel: not made in rolling mills
 3542 Upsetters (forging machines)
 2819 Uranium slug, radioactive
 2873 Urea
 2821 Urea resins
 2822 Urethane rubbers
 3069 Urinals, rubber
 3261 Urinals, vitreous china
 3431 Urinals: enameled iron, cast iron, and pressed metal
 3281 Urns, cut stone
 3634 Urns, electric
 3299 Urns, gypsum or papier mache: factory production only
 3361 Utensils, cast aluminum
 2654 Utensils, paper: *mfp* except from pressed and molded pulp
 2646 Utensils, pressed and molded pulp: *mfp*
 3479 Utensils, retinning of: not done in rolling mills
 3469 Utensils: household, commercial, and hospital—metal, except cast aluminum
 3469 Utensils: household, commercial, and hospital—porcelain enameled
 3448 Utility buildings, prefabricated or portable: metal
 3429 Utility carriers, car top
- V
- 3041 V-belts, rubber or plastics
 2831 Vaccines
 3429 Vacuum bottles and jugs
 3714 Vacuum brakes, motor vehicle
 3743 Vacuum brakes, railway
 3673 Vacuum capacitors, relays, and switches
 3041 Vacuum cleaner hose, plastics
 3041 Vacuum cleaner hose, rubber
 3635 Vacuum cleaners and sweepers, electric: household
 3589 Vacuum cleaners and sweepers, electric: industrial
 3567 Vacuum furnaces and ovens
 3563 Vacuum pumps, except laboratory
 3811 Vacuum pumps, laboratory
 3443 Vacuum tanks, metal plate
 3825 Vacuum tube bridges (electrical measuring instruments)
 3443 Vacuum tunnels, metal plate
 2771 Valentines, except hand painted: printed, engraved, lithographed, etc.
 3161 Valises, regardless of material
 2861 Valonia extract
 3714 Valve cores, tire
 3541 Valve grinding machines
 3494 Valves and pipe fittings, metal
 3494 Valves, air ventilating: metal
 3592 Valves, aircraft
 3494 Valves, automatic control
 3592 Valves, engine
 3069 Valves, hard rubber
 3494 Valves, hydraulic and pneumatic control

STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|---|------|--|
| 3494 | Valves, line: steam, water, oil, and machinery—except plumbers' brass | 2449 | Vegetable baskets, veneer and splint |
| 3592 | Valves, motor vehicle | 2679 | Vegetable cooking and salad oils, except corn oil: refined |
| 3679 | Valves, plastics | 2449 | Vegetable crates, wood: wirebound |
| 3494 | Valves, poppit: metal | 2683 | Vegetable gelatin (agar-agar) |
| 3494 | Valves, steering control: for ships | 3523 | Vegetable grading, cleaning, and sorting machines (agricultural) |
| 3131 | Vamps, leather | 2033 | Vegetable juices: canned, bottled, and bulk |
| 3599 | Vanes, weather | 2633 | Vegetable oils, medicinal grade: refined and concentrated |
| 2869 | Vanillin, synthetic | 2699 | Vegetable oils, vulcanized or sulfurized |
| 2434 | Vanities, bathroom and other | 2633 | Vegetable purees |
| 3961 | Vanity cases, except precious metal and leather | 2635 | Vegetable sauces, except tomato |
| 3172 | Vanity cases, leather | 2076 | Vegetable tallow |
| 3911 | Vanity cases, precious metal | 2033 | Vegetables, canned |
| 2511 | Vanity dressers | 2034 | Vegetables, dried or dehydrated |
| 3822 | Vapor heating controls | 2099 | Vegetables, peeled for the trade |
| 3641 | Vapor lamps, electric | 2035 | Vegetables, pickled and brined |
| 3569 | Vapor separators (machinery) | 2037 | Vegetables, quick frozen and cold pack (frozen) |
| 3634 | Vaporizers, electric: household | 2034 | Vegetables, sulphured |
| 3674 | Variable capacitance diodes | 3429 | Vehicle hardware: aircraft, automobile, railroad, etc. |
| 2011 | Variety meats (fresh edible organs), <i>misc</i> | 2491 | Vehicle lumber, treated |
| 3676 | Varistors | 2426 | Vehicle stock, hardwood |
| 3991 | Varnish brushes | 3824 | Vehicle tank meters |
| 2851 | Varnish removers | 3944 | Vehicles except bicycles, children's |
| 2851 | Varnish stains | 3711 | Vehicles, motor: including amphibian |
| 2851 | Varnishes | 2396 | Veils and veiling, except hair |
| 3479 | Varnishing of metal products, for the trade | 3999 | Veils made of hair |
| 2295 | Varnishing of textiles | 3111 | Vellum leather |
| 3281 | Vases, cut stone | 3944 | Velocipedes |
| 3229 | Vases, glass | 2311 | Velours |
| 3299 | Vases, gypsum or papier mache: factory production only | 2211 | Velveteens |
| 3269 | Vases, pottery (china, earthenware, and stoneware) | 2211 | Velvets, cotton |
| 2261 | Vat dyeing of cotton broad woven fabrics | 2221 | Velvets, man-made fiber and silk |
| 2262 | Vat dyeing of man-made fiber and silk broad woven fabrics | 3581 | Vending machines, for merchandise: coin-operated |
| 2231 | Vat dyeing of tops, yarn, and textiles: of animal fibers—except knit | 2449 | Veneer baskets, for fruits and vegetables |
| 2865 | Vat dyes, synthetic | 2411 | Veneer logs |
| 3443 | Vats, metal plate | 3553 | Veneer mill machines |
| 3444 | Vats, sheet metal | 2436 | Veneer mills, hardwood |
| 2449 | Vats, wood: coopered | 2436 | Veneer mills, softwood |
| 2499 | Vats, wood: except coopered | 2435 | Veneer stock, hardwood |
| 3499 | Vault doors and linings, iron and steel | 2436 | Veneer stock, softwood |
| 3499 | Vaults, except grave vaults: iron and steel | 2499 | Veneer work, inlaid |
| 3272 | Vaults, grave: concrete and precast terrazzo | 3553 | Venetian blind machines (woodworking machinery) |
| 3995 | Vaults, grave: metal | 2431 | Venetian blind slats, wood |
| 2011 | Veal, <i>misc</i> | 2241 | Venetian blind tapes |
| | | 2591 | Venetian blinds |
| | | 2631 | Venoms |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3634 Ventilating fans, electric: household—kitchen
 3564 Ventilating, blowing, and exhaust fans: industrial and commercial use
 3444 Ventilators, sheet metal
 3573 Verifiers
 2098 Vermicelli
 3296 Vermiculite, exfoliated
 2834 Vermifuges
 2816 Vermillion pigment
 3545 Verniers (machinists' precision tools)
 3541 Vertical turning and boring machines (metalworking)
 3443 Vessels, pressure: industrial—metal plate (made in boiler shops)
 3443 Vessels, process and storage: metal plate (made in boiler shops)
 2389 Vestments, academic and clerical
 2329 Vests, sport: suede, leatherette, blanket lined—men's and boys'
 2311 Vests: except suede, leatherette, blanket lined—men's and boys'
 3841 Veterinarians' instruments and apparatus
 2834 Veterinary pharmaceutical preparations
 3221 Vials, glass: made in glass making establishments
 3231 Vials, made from purchased glass
 3079 Vials, plastics
 3931 Vibraphones
 3829 Vibration meters, analyzers, and calibrators
 3531 Vibrators for concrete construction
 3999 Vibrators, electric: designed for beauty and barber shops
 3612 Vibrators, interrupter
 3651 Video triggers (remote control TV devices)
 3679 Video triggers, except remote control TV devices
 2013 Vienna sausage, canned or not canned
 2221 Vinal broad woven fabrics
 2824 Vinal fibers
 2282 Vinal filament yarn: throwing, twisting, winding, or spooling
 2281 Vinal yarn, made from purchased staple: spun
 2099 Vinegar
 2035 Vinegar pickles and relishes
 2869 Vinyl acetate
 3292 Vinyl asbestos tile
 2295 Vinyl coated fabrics
 2851 Vinyl coatings, strippable
 2851 Vinyl plastisol
 2821 Vinyl resins
 2824 Vinylidene chloride fibers
 2221 Vinyon broad woven fabrics
 2282 Vinyon filament yarn: throwing, twisting, winding, or spooling
 2281 Vinyon yarn, made from purchased staple: spun
 3931 Violins and parts
 2881 Viruses
 2823 Viscose fibers, bands, strips, and yarn
 3829 Viscosimeters, except industrial process type
 3823 Viscosimeters, industrial process type
 3423 Visers, carpenters'
 3545 Visers, machine (machine tool accessories)
 2753 Visiting cards, engraved
 2752 Visiting cards, lithographed
 2754 Visiting cards: gravure printing
 2751 Visiting cards: letterpress and screen printing
 2396 Visors, cap
 2044 Vitamin and mineral enriched rice
 2834 Vitamin preparations
 2833 Vitamins, natural and synthetic: bulk, uncompounded
 2085 Vodka
 3679 Voice controls
 2655 Voids and pans, fiber and cardboard: *m/fpm*
 2211 Voiles, cotton
 2221 Voiles, man-made fiber and silk
 3825 Volt-ohm milliammeters
 3612 Voltage regulating transformers, electric power
 3694 Voltage regulators, automotive
 3612 Voltage regulators, transmission and distribution
 3825 Voltmeters
 3523 Volume guns (irrigation equipment)
 3579 Voting machines
 2655 Vulcanized fiber boxes, *m/fpm*
 3079 Vulcanized fiber sheets, rods, and tubes
 2822 Vulcanized oils

W

- 3949 Wading pools, plastic coated fabric
 2293 Wads and wadding, except excelsior
 3482 Wads, ammunition: 30 mm. (or 1.18 inch) and below
 2052 Wafers, sugar

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STANDARD INDUSTRIAL CLASSIFICATION

2211	Waffle cloth, cotton	2329	Wash suits: men's, youths', and boys'
3634	Waffle irons, electric	2328	Washable service apparel, men's: hospital, professional, barbers', etc.
2038	Waffles, frozen	2339	Washable service apparel: nurses', maids', waitresses', etc.
3523	Wagons and trailers, farm	2499	Washboards, wood and part wood
3944	Wagons, children's: coaster, express, and play	2211	Washcloths, except knit: made in weaving mills
3069	Wainscoting, rubber	2259	Washcloths, made in knitting mills
2431	Wainscots, wood	2392	Washcloths, <i>m/ypm</i>
2396	Waistbands, trouser	2641	Washcloths, paper: soap impregnated— <i>m/ypm</i>
2361	Waists: girls', children's, and infants'— <i>m/ypm</i>	3532	Washers, aggregate and sand
2331	Waists: women's, misses', and juniors'— <i>m/ypm</i>	3551	Washers, bottle: for food products
2339	Waitresses' washable service apparel	3293	Washers, leather
3842	Walkers	3452	Washers, metal
3944	Walkers, baby (vehicles)	3861	Washers, photographic print and film
3272	Wall base, precast terrazzo	3069	Washers, rubber
2522	Wall cases, office: metal	2844	Washes, cosmetic
3259	Wall coping, clay	2841	Washing compounds
3433	Wall heaters, except electric	3469	Washing machine parts, porcelain enameled
3634	Wall heaters, household: electric	3582	Washing machines, commercial
3645	Wall lamps	3633	Washing machines, household: including coin-operated
3272	Wall squares, concrete	2294	Waste, textile mill: processing of
3253	Wall tile, ceramic: glazed and unglazed	2655	Wastebaskets, fiber (metal end or all fiber): <i>m/ypm</i>
2649	Wall tile, enameled masonite: <i>m/ypm</i>	3231	Watch crystals, made from purchased glass
2661	Wall tile, fiber board: <i>mitse</i>	3915	Watch jewels
2649	Wallboard, decorated: <i>m/ypm</i>	3559	Watch rate recorders
2661	Wallboard, except gypsum: cellular fiber or hard pressed— <i>mitse</i>	3172	Watch straps, leather
3275	Wallboard, gypsum	3961	Watchbands, base metal
3172	Wallets, regardless of material	3911	Watchbands, precious metal
2842	Wallpaper cleaners	3873	Watchcases
2621	Wallpaper stock (hanging paper), <i>mitse</i>	3873	Watches and parts: except crystals and jewels
3559	Wallpaper trimmers	3221	Water bottles, glass
2649	Wallpaper, embossed plastic: made on textile backing	3069	Water bottles, rubber
2649	Wallpaper, <i>m/ypm</i>	3431	Water closets: enameled iron, cast iron, and pressed metal
3952	Walnut oil, artists'	3952	Water colors, artists'
2076	Walnut oil, except artists' materials	3589	Water conditioners, for swimming pools
3999	Walnut shell flour	3585	Water coolers, electric
2643	Wardrobe bags (closet accessories), <i>m/ypm</i>	2834	Water decontamination or purification tablets
3161	Wardrobe bags (luggage)	3589	Water filters and softeners, household type
2392	Wardrobe bags, <i>m/ypm</i>	2819	Water glass
2511	Wardrobes, household: wood	3822	Water heater controls
3585	Warm air furnaces	3639	Water heaters, household
3079	Warmers, bottle: plastics	3321	Water hydrants, street: cast iron
3552	Warp and knot tying machines (textile machinery)		
2258	Warp or flat knit fabrics of all materials		
3552	Warping machines (textile machinery)		
3272	Wash foundations, precast terrazzo		

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 3599 Water leak detectors
 3569 Water motors
 2851 Water paints
 3321 Water pipe, cast iron
 3634 Water pulsating devices, electric
 3589 Water purification equipment, household type
 3823 Water quality monitoring and control systems
 2261 Water repellency finishing of cotton broad woven fabrics
 3589 Water softeners
 3443 Water tanks, metal plate
 3829 Water temperature gauges, motor vehicle
 3811 Water testing apparatus
 3432 Water traps
 2899 Water treating compounds
 3523 Water troughs
 3494 Water valves, except plumbers' brass goods and fittings
 3533 Water well drilling machinery
 3511 Water wheels and turbines
 2899 Water, distilled
 2866 Water, pasteurized: bottled or canned
 2834 Water, sterile: for injections
 3979 Watering pots, plastics
 3824 Watermeters, consumption registering
 2645 Waterproof cardboard, *m/psm*
 2385 Waterproof outer garments, except vulcanized rubber and oiled—*m/psm*
 2641 Waterproof wrapping paper, *m/psm*
 2899 Waterproofing compounds
 2295 Waterproofing fabrics, except rubberizing
 3825 Watt meters
 3825 Watt-hour and demand meters, combined
 3825 Watt-hour and time switch meters, combined
 3825 Watt-hour meters, electric
 2861 Wattle extract
 3679 Wave guides and fittings
 3625 Waveform measuring and/or analyzing equipment
 3662 Waveguide pressurization equipment
 2842 Wax removers
 3952 Wax, artists'
 2899 Wax, core
 3843 Wax, dental
 2911 Wax, paraffin: produced in petroleum refineries
 2891 Wax, sealing
 2841 Waxed paper, *m/psm*
 2842 Waxes for wood, fabricated leather, and other materials
 **** Waxes, synthetic vegetable—code according to material from which made
 2295 Waxing of cloth
 3662 Weapon simulators
 3442 Weather strip, metal
 3069 Weather strip, sponge rubber
 2431 Weather strip, wood
 3599 Weather vanes
 3357 Weatherproof wire and cable, nonferrous
 2231 Weaving mills, broad woven fabrics: of wool, mohair, and similar fibers
 2211 Weaving mills, cotton broad woven fabrics
 2241 Weaving mills: cotton, wool, silk, and man-made fiber narrow fabrics
 2281 Weaving yarn: cotton, silk, and man-made staple
 2283 Weaving yarn: wool, mohair, or similar animal fiber
 2299 Webbing, jute
 2241 Webbing, woven: except jute
 2499 Webbing: cane, reed, and rattan
 2241 Webs, strapping
 3523 Weeding machines, agricultural
 3576 Weighing machines and apparatus: automatic computing, coin-operated, etc.
 3199 Welders' aprons, leather
 3151 Welders' gloves
 3842 Welders' hoods
 3199 Welders' jackets, leggings, and sleeves: leather
 3549 Welding and cutting apparatus, except electric, laser, ultrasonic, etc.
 3623 Welding apparatus and accessories, electric
 2899 Welding fluxes
 3544 Welding positioners (jigs)
 3356 Welding rods
 **** Welding shops—see nonmanufacturing
 3623 Welding wire, bare and coated
 3623 Welding wire, electric
 3443 Weldments
 3494 Well adapters, tipless: brass
 3317 Well casing, wrought: welded, lock joint, and heavy riveted—*m/psm*
 3312 Well casings, iron and steel: made in steel works or rolling mills
 3272 Well curbing, concrete

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STANDARD INDUSTRIAL CLASSIFICATION

- | | | | |
|------|--|------|---|
| 2892 | Well shooting torpedoes (explosives) | 3842 | Whirlpool baths, hydrotherapy equipment |
| 3531 | Wellpoint systems | 3991 | Whisk brooms |
| 3444 | Wells, light: sheet metal | 2085 | Whiskey: bourbon, rye, scotch type, and corn |
| 3111 | Welting leather | 2816 | White lead pigments |
| 3131 | Welting, leather (cut stock and finding) | 3369 | White metal castings (lead, antimony, and tin) |
| 2399 | Welts, <i>m/fpm</i> | 3901 | Whiteprint (diaz) paper and cloth, sensitized |
| 2631 | Wet machine board, <i>mitse</i> | 3961 | Whiteprint (diasotype) reproduction machines and equipment |
| 3069 | Wet suits, rubber | 3263 | Whiteware, fine type semivitreous table and kitchen articles |
| 2843 | Wetting agents | 2816 | Whiting |
| 2977 | Whale oil, refined | 3329 | Whole body counters, nuclear |
| 2511 | Whatnot shelves, wood | 3292 | Wick, asbestos |
| 2043 | Wheat flakes | 2519 | Wicker furniture, padded or plain |
| 2041 | Wheat flour | 2241 | Wicking |
| 2041 | Wheat germ | 2211 | Wigan, cotton |
| 2041 | Wheat mill feed | 3999 | Wigs: including doll wigs, toupees, or wigslets, except custom made |
| 2046 | Wheat starch | 2519 | Willow furniture, padded or plain |
| 3825 | Wheatstone bridges (electrical measuring instruments) | 2499 | Willow ware, except furniture |
| 3549 | Wheel balancing equipment, automotive | 2271 | Wilton carpets |
| 3369 | Wheel balancing weights, lead | 3531 | Winches, all types |
| 3343 | Wheel chairs | 3999 | Wind chimes |
| 3549 | Wheel mounting and balancing equipment | 3332 | Wind correctors, military |
| 3423 | Wheel pullers (hand tools) | 3443 | Wind tunnels |
| 3545 | Wheel turning equipment, diamond point and other (tool accessories) | 3329 | Windbreakers: men's, youths', and boys' |
| 3799 | Wheelbarrows | 3552 | Winders (textile machinery) |
| 3291 | Wheels, abrasive: except dental | 2282 | Winding yarn: cotton, silk, and man-made fiber continuous filament |
| 3343 | Wheels, abrasive: dental | 2283 | Winding yarn: wool, mohair, or similar animal fibers |
| 3728 | Wheels, aircraft | 3523 | Windmill heads and towers |
| 3462 | Wheels, car and locomotive: forged—not made in rolling mills | 2541 | Window backs, store and lunchroom: prefabricated—wood |
| 3312 | Wheels, car and locomotive: iron and steel— <i>mitse</i> | 3993 | Window cutouts and displays |
| 3291 | Wheels, diamond abrasive | 3442 | Window frames and sash, metal and metal covered |
| 3291 | Wheels, grinding: artificial | 2491 | Window frames and sash, wood |
| 3714 | Wheels, motor vehicle | 3211 | Window glass, clear and colored |
| 3511 | Wheels, water | 3979 | Window screening, plastics |
| 3499 | Wheels: wheelbarrow, stroller, lawn mower, etc.—disc type, stamped metal | 3442 | Window screens, metal frame |
| 2411 | Wheelstock, hewn | 2431 | Window screens, wood |
| 3291 | Whetstones, artificial | 2211 | Window shade cloth, cotton |
| **** | Whetstones, made from natural stone—see nonmanufacturing | 2295 | Window shade cloth, impregnated or coated |
| 2021 | Whey butter | 2591 | Window shade rollers and fittings |
| 2023 | Whey: concentrated, condensed, dried, evaporated, and powdered | 2591 | Window shades |
| 2351 | Whimseys and miniatures (millinery) | 3979 | Window sheeting, plastics |
| 2026 | Whipped cream | 3272 | Window sills, cast stone |
| 2026 | Whipped topping, butterfat base | | |
| 3634 | Whippers, household: electric | | |
| 3199 | Whips, horse | | |
| 3199 | Whipstocks | | |

ALPHABETIC INDEX, MANUFACTURING INDUSTRIES

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- 2431 Window trim, wood
 3442 Windows, louver: all metal or metal frame
 2431 Windows, louver: wood
 3231 Windows, stained glass
 3442 Windows, storm: metal
 2431 Windows, storm: wood
 3523 Windrowers, self-propelled and pull
 3714 Windshield frames, motor vehicle
 3714 Windshield wiper system, all types
 3231 Windshields, made from purchased glass
 3079 Windshields, plastics
 2084 Wines: still, sparkling, and artificially carbonated
 3723 Wing assemblies and parts, aircraft
 3714 Winterfronts, motor vehicle
 2899 Wintergreen oil
 3714 Wipers, windshield: motor vehicle
 3496 Wire and wire products *m/fpm*: except insulated wire, and nails and spikes
 3549 Wire drawing and fabricating machinery and equipment, except dies
 3544 Wire drawing and straightening dies
 3315 Wire products, ferrous: made in wire drawing plants
 3312 Wire products, iron and steel: made in steel works or rolling mills
 2296 Wire rope centers
 3496 Wire winding of purchased wire
 3355 Wire, aluminum: made in rolling mills
 3496 Wire, concrete reinforcing: made from purchased wire
 3351 Wire, copper and copper alloy: made in brass mills
 3315 Wire, ferrous
 3316 Wire, flat: cold rolled strip—not made in hot rolling mills
 3356 Wire, nonferrous except copper and aluminum: made in rolling mills
 3357 Wire, nonferrous: bare, insulated, or armored—*m/fpm*
 3315 Wire, steel: insulated or armored
 3699 Wires, lead-in: electric lamp—made from purchased wire
 3714 Wiring harness sets (other than ignition), automotive
 2861 Wood alcohol, natural
 2421 Wood chips manufacturing
 2861 Wood creosote
 2861 Wood distillates
 3559 Wood drying kilns
 2861 Wood filters and sealers
 2499 Wood flour
 3131 Wood heel blocks, for sale as such
 3131 Wood heels, finished (shoe findings)
 2861 Wood oils, product of hardwood distillation
 2491 Wood products, creosoted
 2811 Wood pulp
 3452 Wood screws
 2851 Wood stains
 2429 Wood wool (excelsior)
 2499 Wood, except furniture: turned and carved
 2899 Wood, plastic
 2753 Woodcuts for use in printing illustrations, posters, etc.
 2499 Woodenware, kitchen and household
 2431 Woodwork, interior and ornamental: windows, doors, sash, mantels, etc.
 3553 Woodworking machines
 3552 Wool and worsted finishing machines
 2231 Wool broad woven fabrics
 2299 Wool grease, mohair, and similar fibers
 2241 Wool narrow woven goods
 3999 Wool pulling
 2299 Wool scouring and carbonizing
 2294 Wool shoddy
 2299 Wool tops, combing and converting
 2294 Wool waste processing
 2283 Wool yarn: spinning, twisting, winding, or spooling
 3296 Wool, mineral: made of rock, slag, and silica minerals
 3291 Wool, steel
 2035 Worcestershire sauce
 2599 Work benches, factory
 2328 Work garments, waterproof: except raincoats—oiled fabric
 2259 Work gloves and mittens, *m/tee*
 3069 Work gloves and mittens: rubber
 3151 Work gloves, leather
 3079 Work gloves, plastics
 2361 Work gloves: except knit, all-leather, rubber, plastic, and asbestos
 2328 Work jackets
 2328 Work pants
 3536 Work platforms, elevated
 2328 Work shirts: men's, youths', and boys'
 3143 Work shoes, men's
 3811 Work tables, laboratory
 2299 Worsted combing
 2231 Worsted fabrics, broad woven
 3496 Woven wire products, made from purchased wire
 2429 Wrappers, excelsior

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STANDARD INDUSTRIAL CLASSIFICATION

2752 Wrappers, lithographing of
2649 Wrappers, paper except coated, oiled, or
waxed: unprinted—*mjpm*
2754 Wrappers: gravure printing
2751 Wrappers: letterpress and screen (in-
cluding flexographic) printing
3569 Wrapping and packaging machines, ex-
cept food wrapping machines
3551 Wrapping machines: bread, confection-
ery, and other food products
2621 Wrapping paper, *mitse*
2641 Wrapping paper, waterproof: *mjpm*
3962 Wreaths, artificial
3962 Wreaths, garlands, and sprays: made
from tree boughs, cones, etc.
3423 Wrenches (hand tools)
3633 Wringers, domestic laundry
3589 Wringers, mop
2253 Wristlets, *mitse*
2899 Writing ink and fluids
2648 Writing paper and envelopes, boxed sets:
mjpm
2621 Writing paper, *mitse*
2648 Writing tablets, *mjpm*
3317 Wrought pipe and tubes: welded, lock
joint, and heavy riveted—*mjpm*
3312 Wrought pipe and tubing, made in steel
works or rolling mills

X

3893 X-ray apparatus and tubes: for medical,
industrial, research, and control

3861 X-ray film

3893 X-ray generators

3861 X-ray plates, sensitized

3825 X-Y recorders (plotters) except comput-
er peripheral equipment

2879 Xanthone (formulated)

2865 Xylene, product of coal tar distillation

2865 Xylol, product of coal tar distillation

3931 Xylophones and parts

Y

3494 Y bends and branches, pipe
3499 Y-guns (ordnance)
8731 Yachts, building and repairing
2499 Yard sticks, wood
2231 Yarn bleaching, dyeing, and finishing: of wool, mohair, and similar fibers
2269 Yarn bleaching, dyeing, and other finishing: except wool

2281	Yarn spinning: cotton, silk, and man-made staple
2552	Yarn texturizing machines
2211	Yarn-dyed fabrics, cotton
2292	Yarn, asbestos
2283	Yarn, carpet and rug: animal fiber—spinning, twisting, and spooling
2823	Yarn, cellulosic: made in chemical plants (primary products)
2229	Yarn, fiberglass: made in glass plants
2299	Yarn, metallic, ceramic, or paper fibers
2824	Yarn, organic man-made fiber except cellulosic
2223	Yarn, viscose
2281	Yarn: cotton, silk, and man-made staple
2299	Yarn: flax, jute, hemp, and ramie
2283	Yarn: spinning, twisting, winding, or spooling—animal fiber
2283	Yarn: weaving, machine knitting, and hand knitting—animal fiber
2241	Yarns: fabric covered rubber
2295	Yarns: plastic coated: made from purchased yarns
2299	Yarns, specialty and novelty
2099	Yeast
2026	Yoghurt

Z

2824 Zein fibers
3874 Zener diodes
3356 Zinc and zinc alloy bars, plates, pipe, rods, sheets, tubing, wire, etc.
2819 Zinc chloride
3369 Zinc die castings
3333 Zinc dust, primary
3341 Zinc dust, reclaimed
3497 Zinc foil, not made in rolling mills
2834 Zinc ointment
2851 Zinc oxide in oil (paint)
2816 Zinc oxide pigments
2816 Zinc pigments: zinc yellow and zinc sulfide
3356 Zinc rolling, drawing, and extruding
3333 Zinc slabs, ingots, and refinery shapes: primary
3333 Zinc smelting and refining, primary
3341 Zinc smelting and refining, secondary
2241 Zipper tape
3364 Zippers (slide fasteners)
3356 Zirconium and zirconium alloy bars, rods, billets, sheets, strip, tubing
3339 Zirconium metal, sponge and granules
3331 Zithers and parts
2026 Zoolak
2652 Zwieback, machine-made

Appendixes

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Appendix A

Central Administrative Office and Auxiliary Establishments

Introduction

A central administrative office is an establishment primarily engaged in general administrative, supervisory, accounting, purchasing, engineering and systems planning, advertising, legal, financial, or related management functions performed centrally for other establishments of the same company. Central administrative offices characteristically do not produce any products nor do they provide any services for the general public, other companies, or government.

An auxiliary unit is an establishment primarily engaged in performing supporting services for other establishments of the same company rather than for the general public or for other business firms. Auxiliaries include such diverse activities as research, development, and testing laboratories of manufacturing firms developing new or improved products with the company's own funds or on Federal contract; central warehouses for the company's own merchandise; central garages for the company's own vehicles; trading stamp redemption stores; milk receiving stations; and sales promotion offices.

A central administrative office or auxiliary unit should be considered a separate establishment if (1) it is at a different general location from the establishment(s) served; or (2) it is at the same location as one of the company's establishments but also serves other establishments of the same company and is not operated as an integral part of the establishment at the same location.

Separate farm, mining, construction, and manufacturing establishments primarily producing goods for establishments of the same company are not considered auxiliary units, but are classified on the basis of their primary activity.

Separate establishments primarily engaged in long distance trucking, stevedoring, water transportation or pipe line transportation for other establishments of the same company are classified in transportation.

Separate sales branches and sales offices of manufacturing and mining companies are not classified as auxiliaries but as wholesale trade establishments.

For the Public Administration Division there generally are no central administrative offices. All administrative and other offices are classified in the most appropriate industry. There are auxiliary establishments such as automotive maintenance shops and recreational facilities for the Public Administration Division.

Borderlines Between Operating and Auxiliary Establishments

Following are examples of the more important types of auxiliary establishments primarily engaged in performing supporting services for other establishments of the same company:

1. A separate research and development or testing laboratory operated for manufacturing plants of the same company. However, research farms are included in Division A, and commercial laboratories primarily engaged in research, development, and testing of products for the general public or for other business firms on a fee or contract basis are included in Division I.
2. A separate warehouse or storage yard for merchandise of establishments of the same company for its own use and not for public storage. The warehouse or storage yard may be auxiliary to manufacturing, construction, wholesale, retail, etc., establishments of the same company.
3. Trading stamp redemption stores (since they support the activities of those establishments of the owning company which originally sold the trading stamps to retail business firms); but establishments primarily engaged in selling trading stamps to other business firms are classified in Division I.
4. An automotive repair shop or storage garage operated by a department store (or manufacturing or transportation company) for its own use and not for the public (commercial) repair or storage of vehicles.
5. A separate repair shop serving various establishments of the same company primarily for the maintenance and repairs of its own machinery and equipment.
6. Showrooms in which sales do not take place.
7. Milk receiving stations for dairies.
8. Field engineering support activities.
9. Separate establishments engaged in news collection, editorial work, or advertising sales related to the publishing activity of the same company.
10. A separate establishment providing equipment to construction establishments of the same company.
11. Recreational facilities (bowling alleys, swimming pools, etc.) maintained by a company for the benefit of its employees.
12. Computing, tabulating, or data processing establishments primarily operated for a company's own use, rather than for the general public or for other business firms.
13. Purchasing offices of multiunit firms.
14. Accounting and billing facilities operated for company use.

Industrial Classification of Central Administrative Office and Auxiliary Establishments

Central administrative office and auxiliary establishments are classified industrially on the basis of the primary activity of the operating establishment(s) they serve. In addition, they may be further subclassified according to the principal type of function performed, such as centralized administration; research, development, and testing; warehousing; etc.

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The distinction between operating establishments and separately reported central administrative offices or auxiliary units will be made by use of a supplemental code associated with the most appropriate four-digit industry representing the primary activity of the establishments served.

Agencies should provide for the separate presentation of statistics for operating establishments vs. central administrative offices and auxiliary units whenever data for both types of establishments are presented on an industry basis.

Appendix B

List of Short SIC Titles

The official SIC titles of the divisions and the 2-, 3-, and 4-digit industries are those shown in the main body of this manual. For various reasons, including presentation of statistical tables, it is desirable to have a standard list of short SIC titles so that all agencies may use the same short titles for the same codes as long as the titles fit the space requirements of the publication.

The standard short titles below have been limited to 36 spaces for 4-digit SIC codes and 38 spaces for 2-digit and 3-digit codes. Where a 2-digit major group or 3-digit industry group contains only a single 4-digit industry, then the 2-digit or 3-digit titles are allowed 36 rather than 38 spaces.

If the official SIC title falls within the short title space limitation above, it is generally used without change. An exception is made when the official title is short enough, but it is one of a series of short titles within a 3- or 2-digit group. In this case the short title is made to conform to the rest of the titles in the group. For example, the official title for SIC 2323 is "Men's, youths', and boys' neckwear." This is less than 36 spaces and would also have been used as a short title. However, some of the other official titles in industry groups 231 and 232 had to be shortened to fit within 36 spaces by using the term "men's and boys'" for "men's, youths', and boys'" for each of the titles in the group.

It is understood, of course, that just as a title itself is not sufficient to define an industry, so too a short title may not appear to represent the same content as the official title. Content can only be defined by reference to the official title and description within a particular economic sector of the classification.

In view of the fact that the standard short titles are intended to apply to publication copy, abbreviations of individual words are avoided if at all possible. However in a number of instances, abbreviations are necessary, as follows:

admin.....	administration	Intl.....	International
&.....	and	misc.....	miscellaneous
exc. or ex.....	except	nec.....	not elsewhere
Fed.....	Federal		classified
incorp.....	incorporated	Res.....	Reserve

LIST OF SHORT SIC TITLES

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A. AGRICULTURE, FORESTRY, AND FISHING

<i>Code</i>	<i>Short Title</i>
01	AGRICULTURAL PRODUCTION—CROPS
011	Cash Grains
0111	Wheat
0112	Rice
0115	Corn
0116	Soybeans
0119	Cash grains, nec
013	Field Crops, Except Cash Grains
0131	Cotton
0132	Tobacco
0133	Sugar crops
0134	Irish potatoes
0139	Field crops, except cash grains, nec
016	Vegetables and Melons
0161	Vegetables and melons
017	Fruits and Tree Nuts
0171	Berry crops
0172	Grapes
0173	Tree nuts
0174	Citrus fruits
0175	Deciduous tree fruits
0179	Fruits and tree nuts, nec
018	Horticultural Specialties
0181	Ornamental nursery products
0183	Food crops grown under cover
0189	Horticultural specialties, nec
019	General Farms, Primarily Crop
0191	General farms, primarily crop
02	AGRICULTURAL PRODUCTION—LIVESTOCK
021	Livestock, exc. Dairy, Poultry, etc.
0211	Beef cattle feedlots
0212	Beef cattle, except feedlots
0213	Hogs
0214	Sheep and goats
0219	General livestock, nec
024	Dairy Farms
0241	Dairy farms
025	Poultry and Eggs
0251	Broiler, fryer, and roaster chickens
0252	Chicken eggs
0253	Turkeys and turkey eggs
0254	Poultry hatcheries
0259	Poultry and eggs, nec
027	Animal Specialties
0271	Fur-bearing animals and rabbits

<i>Code</i>	<i>Short Title</i>
0272	Horses and other equines
0279	Animal specialties, nec
029	General Farms, Primarily Livestock
0291	General farms, primarily livestock
07	AGRICULTURAL SERVICES
071	Soil Preparation Services
0711	Soil preparation services
072	Crop Services
0721	Crop planting and protection
0722	Crop harvesting
0723	Crop preparation services for market
0724	Cotton ginning
0729	General crop services
074	Veterinary Services
0741	Veterinary services, farm livestock
0742	Veterinary services, specialties
075	Animal Services, Except Veterinary
0751	Livestock services, exc. specialties
0752	Animal specialty services
076	Farm Labor and Management Services
0761	Farm labor contractors
0762	Farm management services
078	Landscape and Horticultural Services
0781	Landscape counseling and planning
0782	Lawn and garden services
0783	Ornamental shrub and tree services
08	FORESTRY
081	Timber Tracts
0811	Timber tracts
082	Forest Nurseries and Seed Gathering
0821	Forest nurseries and seed gathering
084	Gathering of Misc. Forest Products
0843	Extraction of pine gum
0849	Gathering of forest products, nec
085	Forestry Services
0851	Forestry services
09	FISHING, HUNTING, AND TRAPPING
091	Commercial Fishing
0912	Finfish
0913	Shellfish
0919	Miscellaneous marine products
092	Fish Hatcheries and Preserves
0921	Fish hatcheries and preserves
097	Hunting, Trapping, Game Propagation
0971	Hunting, trapping, game propagation

STANDARD INDUSTRIAL CLASSIFICATION

Code	Short Title
10	METAL MINING

11	ANTHRACITE MINING
111	Anthracite Mining
1111	Anthracite
1112	Anthracite mining services
12	BITUMINOUS COAL AND LIGNITE MINING
121	Bituminous Coal and Lignite Mining
1211	Bituminous coal and lignite
1212	Bituminous & lignite mining services

<i>Code</i>	<i>Short Title</i>
15	GENERAL BUILDING CONTRACTORS

152 Residential Building Construction
1521 Single-family housing construction
1522 Residential construction, nec
153 Operative Builders
1531 Operative builders
154 Nonresidential Building Construction
1541 Industrial buildings and warehouses
1542 Nonresidential construction, nec

Code	Short Title
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1221	Natural gas liquids
128	Oil and Gas Field Services
1281	Drilling oil and gas wells
1282	Oil and gas exploration services
1289	Oil and gas field services, nec

141 Dimension Stone

1411 Dimension stone
142 Crushed and Broken Stone
1422 Crushed and broken limestone
1423 Crushed and broken granite
1429 Crushed and broken stone, nec
144 Sand and Gravel
1442 Construction sand and gravel
1446 Industrial sand
145 Clay and Related Minerals
1452 Bentonite
1453 Fire clay
1454 Fuller's earth
1455 Kaolin and ball clay
1459 Clay and related minerals, nec
147 Chemical and Fertilizer Minerals
1472 Barite
1473 Fluorspar
1474 Potash, soda, and borate minerals
1475 Phosphate rock
1476 Rock salt
1477 Sulfur
1479 Chemical and fertilizer mining, nec
148 Nonmetallic Minerals Services
1481 Nonmetallic minerals services
149 Miscellaneous Nonmetallic Minerals
1492 Gypsum
1496 Talc, soapstone, and pyrophyllite
1499 Nonmetallic minerals, nec

Code	Short Title
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16 HEAVY CONSTRUCTION CONTRACTORS

161 Highway and Street Construction
1611 Highway and street construction
162 Heavy Construction, Except Highway
1622 Bridge, tunnel, & elevated highway
1623 Water, sewer, and utility lines
1629 Heavy construction, nec

LIST OF SHORT SIC TITLES

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<i>Code</i>	<i>Short Title</i>	<i>Code</i>	<i>Short Title</i>
17	SPECIAL TRADE CONTRACTORS	1752	Floor laying and floor work, nec
171	Plumbing, Heating, Air Conditioning	176	Roofing and Sheet Metal Work
1711	Plumbing, heating, air conditioning	1761	Roofing and sheet metal work
172	Painting, Paper Hanging, Decorating	177	Concrete Work
1721	Painting, paper hanging, decorating	1771	Concrete work
173	Electrical Work	178	Water Well Drilling
1731	Electrical work	1781	Water well drilling
174	Masonry, Stonework, and Plastering	179	Misc. Special Trade Contractors
1741	Masonry and other stonework	1791	Structural steel erection
1742	Plastering, drywall and insulation	1793	Glass and glazing work
1743	Terrazzo, tile, marble, mosaic work	1794	Excavating and foundation work
175	Carpentering and Flooring	1795	Wrecking and demolition work
1751	Carpentering	1796	Installing building equipment, nec
		1799	Special trade contractors, nec

D. MANUFACTURING

<i>Code</i>	<i>Short Title</i>	<i>Code</i>	<i>Short Title</i>
20	FOOD AND KINDRED PRODUCTS	2063	Beet sugar
201	Meat Products	2065	Confectionery products
2011	Meat packing plants	2066	Chocolate and cocoa products
2013	Sausages and other prepared meats	2067	Chewing gum
2016	Poultry dressing plants	207	Fats and Oils
2017	Poultry and egg processing	2074	Cottonseed oil mills
202	Dairy Products	2075	Soybean oil mills
2021	Creamery butter	2076	Vegetable oil mills, nec
2022	Cheese, natural and processed	2077	Animal and marine fats and oils
2023	Condensed and evaporated milk	2079	Shortening and cooking oils
2024	Ice cream and frozen desserts	208	Beverages
2026	Fluid milk	2082	Malt beverages
203	Preserved Fruits and Vegetables	2083	Malt
2032	Canned specialties	2084	Wines, brandy, and brandy spirits
2033	Canned fruits and vegetables	2085	Distilled liquor, except brandy
2034	Dehydrated fruits, vegetables, soups	2086	Bottled and canned soft drinks
2035	Pickles, sauces, and salad dressings	2087	Flavoring extracts and sirups, nec
2037	Frozen fruits and vegetables	209	Misc. Foods and Kindred Products
2038	Frozen specialties	2091	Canned and cured seafoods
204	Grain Mill Products	2092	Fresh or frozen packaged fish
2041	Flour and other grain mill products	2095	Roasted coffee
2043	Cereal breakfast foods	2097	Manufactured ice
2044	Rice milling	2098	Macaroni and spaghetti
2045	Blended and prepared flour	2099	Food preparations, nec
2046	Wet corn milling		
2047	Dog, cat, and other pet food	21	TOBACCO MANUFACTURES
2048	Prepared feeds, nec	211	Cigarettes
205	Bakery Products	2111	Cigarettes
2051	Bread, cake, and related products	212	Cigars
2052	Cookies and crackers	2121	Cigars
206	Sugar and Confectionery Products	213	Chewing and Smoking Tobacco
2061	Raw cane sugar	2131	Chewing and smoking tobacco
2062	Cane sugar refining	214	Tobacco Stemming and Redrying
		2141	Tobacco stemming and redrying

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STANDARD INDUSTRIAL CLASSIFICATION

<i>Code</i>	<i>Short Title</i>
22	TEXTILE MILL PRODUCTS
221	Weaving Mills, Cotton
2211	Weaving mills, cotton
222	Weaving Mills, Synthetics
2221	Weaving mills, synthetics
223	Weaving and Finishing Mills, Wool
2231	Weaving and finishing mills, wool
224	Narrow Fabric Mills
2241	Narrow fabric mills
225	Knitting mills
2251	Women's hosiery, except socks
2252	Hosiery, nec
2253	Knit outerwear mills
2254	Knit underwear mills
2257	Circular knit fabric mills
2258	Warp knit fabric mills
2259	Knitting mills, nec
226	Textile Finishing, Except Wool
2261	Finishing plants, cotton
2262	Finishing plants, synthetics
2269	Finishing plants, nec
227	Floor Covering Mills
2271	Woven carpets and rugs
2272	Tufted carpets and rugs
2279	Carpets and rugs, nec
228	Yarn and Thread Mills
2281	Yarn mills, except wool
2282	Throwing and winding mills
2283	Wool yarn mills
2284	Thread mills
229	Miscellaneous Textile Goods
2291	Felt goods, exc. woven felts & hats
2292	Lace goods
2293	Paddings and upholstery filling
2294	Processed textile waste
2295	Coated fabrics, not rubberized
2296	Tire cord and fabric
2297	Nonwoven fabrics
2298	Cordage and twine
2299	Textile goods, nec
23	APPAREL AND OTHER TEXTILE PRODUCTS
231	Men's and Boys' Suits and Coats
2311	Men's and boys' suits and coats
232	Men's and Boys' Furnishings
2321	Men's and boys' shirts and nightwear
2322	Men's and boys' underwear
2323	Men's and boys' neckwear
2327	Men's and boys' separate trousers
2328	Men's and boys' work clothing
2329	Men's and boys' clothing, nec

<i>Code</i>	<i>Short Title</i>
233	Women's and Misses' Outerwear
2331	Women's & misses' blouses & waists
2335	Women's and misses' dresses
2337	Women's and misses' suits and coats
2339	Women's and misses' outerwear, nec
234	Women's and Children's Undergarments
2341	Women's and children's underwear
2342	Brassieres and allied garments
235	Hats, Caps, and Millinery
2351	Millinery
2352	Hats and caps, except millinery
236	Children's Outerwear
2361	Children's dresses and blouses
2363	Children's coats and suits
2369	Children's outerwear, nec
237	Fur Goods
2371	Fur goods
238	Miscellaneous Apparel and Accessories
2381	Fabric dress and work gloves
2384	Robes and dressing gowns
2385	Waterproof outer garments
2386	Leather and sheep lined clothing
2387	Apparel belts
2389	Apparel and accessories, nec
239	Misc. Fabricated Textile Products
2391	Curtains and draperies
2392	House furnishings, nec
2393	Textile bags
2394	Canvas and related products
2395	Pleating and stitching
2396	Automotive and apparel trimmings
2397	Schiffli machine embroideries
2399	Fabricated textile products, nec
24	LUMBER AND WOOD PRODUCTS
241	Logging Camps & Logging Contractors
2411	Logging camps & logging contractors
242	Sawmills and Planing Mills
2421	Sawmills and planing mills, general
2426	Hardwood dimension and flooring
2429	Special product sawmills, nec
243	Millwork, Plywood & Structural Mem- bers
2431	Millwork
2434	Wood kitchen cabinets
2435	Hardwood veneer and plywood
2436	Softwood veneer and plywood
2439	Structural wood members, nec
244	Wood Containers
2441	Nailed wood boxes and shook
2448	Wood pallets and skids
2449	Wood containers, nec

LIST OF SHORT SIC TITLES

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<i>Code</i>	<i>Short Title</i>	<i>Code</i>	<i>Short Title</i>
245	Wood Buildings and Mobile Homes	27	PRINTING AND PUBLISHING
2451	Mobile homes	271	Newspapers
2452	Prefabricated wood buildings	2711	Newspapers
249	Miscellaneous Wood Products	272	Periodicals
2491	Wood preserving	2721	Periodicals
2492	Particleboard	273	Books
2499	Wood products, nec	2731	Book publishing
		2732	Book printing
25	FURNITURE AND FIXTURES	274	Miscellaneous Publishing
251	Household Furniture	2741	Miscellaneous publishing
2511	Wood household furniture	275	Commercial Printing
2512	Upholstered household furniture	2751	Commercial printing, letterpress
2514	Metal household furniture	2752	Commercial printing, lithographic
2515	Mattresses and bedsprings	2753	Engraving and plate printing
2517	Wood TV and radio cabinets	2754	Commercial printing, gravure
2519	Household furniture, nec	276	Manifold Business Forms
252	Office Furniture	2761	Manifold business forms
2521	Wood office furniture	277	Greeting Card Publishing
2522	Metal office furniture	2771	Greeting card publishing
253	Public Building & Related Furniture	278	Blankbooks and Bookbinding
2531	Public building & related furniture	2782	Blankbooks and looseleaf binders
254	Partitions and Fixtures	2789	Bookbinding and related work
2541	Wood partitions and fixtures	279	Printing Trade Services
2542	Metal partitions and fixtures	2791	Typesetting
259	Miscellaneous Furniture and Fixtures	2793	Photoengraving
2591	Drapery hardware & blinds & shades	2794	Electrotyping and stereotyping
2599	Furniture and fixtures, nec	2795	Lithographic platemaking services
26	PAPER AND ALLIED PRODUCTS	28	CHEMICALS AND ALLIED PROD- UCTS
261	Pulp Mills	281	Industrial Inorganic Chemicals
2611	Pulp mills	2812	Alkalies and chlorine
262	Paper Mills, Except Building Paper	2813	Industrial gases
2621	Paper mills, except building paper	2816	Inorganic pigments
263	Paperboard Mills	2819	Industrial inorganic chemicals, nec
2631	Paperboard mills	282	Plastics Materials and Synthetics
264	Misc. Converted Paper Products	2821	Plastics materials and resins
2641	Paper coating and glazing	2822	Synthetic rubber
2642	Envelopes	2823	Cellulosic man-made fibers
2643	Bags, except textile bags	2824	Organic fibers, noncellulosic
2645	Die-cut paper and board	283	Drugs
2646	Pressed and molded pulp goods	2831	Biological products
2647	Sanitary paper products	2833	Medicinals and botanicals
2648	Stationery products	2834	Pharmaceutical preparations
2649	Converted paper products, nec	284	Soap, Cleaners, and Toilet Goods
265	Paperboard Containers and Boxes	2841	Soap and other detergents
2651	Folding paperboard boxes	2842	Polishes and sanitation goods
2652	Set-up paperboard boxes	2843	Surface active agents
2653	Corrugated and solid fiber boxes	2844	Toilet preparations
2654	Sanitary food containers	285	Paints and Allied Products
2655	Fiber cans, drums & similar products	2851	Paints and allied products
266	Building Paper and Board Mills	286	Industrial Organic Chemicals
2661	Building paper and board mills		

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STANDARD INDUSTRIAL CLASSIFICATION

<i>Code</i>	<i>Short Title</i>
2861	Gum and wood chemicals
2865	Cyclic crudes and intermediates
2869	Industrial organic chemicals, nec
287	Agricultural Chemicals
2873	Nitrogenous fertilizers
2874	Phosphatic fertilizers
2875	Fertilizers, mixing only
2879	Agricultural chemicals, nec
289	Miscellaneous Chemical Products
2891	Adhesives and sealants
2892	Explosives
2893	Printing ink
2895	Carbon black
2899	Chemical preparations, nec
29	PETROLEUM AND COAL PRODUCTS
291	Petroleum Refining
2911	Petroleum refining
295	Paving and Roofing Materials
2951	Paving mixtures and blocks
2952	Asphalt felts and coatings
299	Misc. Petroleum and Coal Products
2992	Lubricating oils and greases
2999	Petroleum and coal products, nec
30	RUBBER AND MISC. PLASTICS PRODUCTS
301	Tires and Inner Tubes
3011	Tires and inner tubes
302	Rubber and Plastics Footwear
3021	Rubber and plastics footwear
303	Reclaimed Rubber
3031	Reclaimed rubber
304	Rubber and Plastics Hose and Belting
3041	Rubber and plastics hose and belting
306	Fabricated Rubber Products, nec
3069	Fabricated rubber products, nec
307	Miscellaneous Plastics Products
3079	Miscellaneous plastics products
31	LEATHER AND LEATHER PRODUCTS
311	Leather Tanning and Finishing
3111	Leather tanning and finishing
313	Boot and Shoe Cut Stock and Findings
3131	Boot and shoe cut stock and findings
314	Footwear, Except Rubber
3142	House slippers
3143	Men's footwear, except athletic
3144	Women's footwear, except athletic
3149	Footwear, except rubber, nec
315	Leather Gloves and Mittens
3151	Leather gloves and mittens

<i>Code</i>	<i>Short Title</i>
316	Luggage
3161	Luggage
317	Handbags and Personal Leather Goods
3171	Women's handbags and purses
3172	Personal leather goods, nec
319	Leather Goods, nec
3199	Leather goods, nec
32	STONE, CLAY, AND GLASS PRODUCTS
321	Flat Glass
3211	Flat glass
322	Glass and Glassware, Pressed or Blown
3221	Glass containers
3229	Pressed and blown glass, nec
323	Products of Purchased Glass
3231	Products of purchased glass
324	Cement, Hydraulic
3241	Cement, hydraulic
325	Structural Clay Products
3251	Brick and structural clay tile
3253	Ceramic wall and floor tile
3255	Clay refractories
3259	Structural clay products, nec
326	Pottery and Related Products
3261	Vitreous plumbing fixtures
3262	Vitreous china food utensils
3263	Fine earthenware food utensils
3264	Porcelain electrical supplies
3269	Pottery products, nec
327	Concrete, Gypsum, and Plaster Products
3271	Concrete block and brick
3272	Concrete products, nec
3273	Ready-mixed concrete
3274	Lime
3275	Gypsum products
328	Cut Stone and Stone Products
3281	Cut stone and stone products
329	Misc. Nonmetallic Mineral Products
3291	Abrasive products
3292	Asbestos products
3293	Gaskets, packing and sealing devices
3295	Minerals, ground or treated
3296	Mineral wool
3297	Nonclay refractories
3299	Nonmetallic mineral products, nec
33	PRIMARY METAL INDUSTRIES
331	Blast Furnace and Basic Steel Products
3312	Blast furnaces and steel mills
3313	Electrometallurgical products
3315	Steel wire and related products

LIST OF SHORT SIC TITLES

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<i>Code</i>	<i>Short Title</i>	<i>Code</i>	<i>Short Title</i>
3316	Cold finishing of steel shapes	345	Screw Machine Products, Bolts, etc.
3317	Steel pipe and tubes	3451	Screw machine products
332	Iron and Steel Foundries	3452	Bolts, nuts, rivets, and washers
3321	Gray iron foundries	346	Metal Forgings and Stampings
3322	Malleable iron foundries	3462	Iron and steel forgings
3324	Steel investment foundries	3463	Nonferrous forgings
3325	Steel foundries, nec	3465	Automotive stampings
333	Primary Nonferrous Metals	3466	Crowns and closures
3331	Primary copper	3469	Metal stampings, nec
3332	Primary lead	347	Metal Services, nec
3333	Primary zinc	3471	Plating and polishing
3334	Primary aluminum	3479	Metal coating and allied services
3339	Primary nonferrous metals, nec	348	Ordinance and Accessories, nec
334	Secondary Nonferrous Metals	3482	Small arms ammunition
3341	Secondary nonferrous metals	3483	Ammunition, exc. for small arms, nec
335	Nonferrous Rolling and Drawing	3484	Small arms
3351	Copper rolling and drawing	3489	Ordinance and accessories, nec
3353	Aluminum sheet, plate, and foil	349	Misc. Fabricated Metal Products
3354	Aluminum extruded products	3493	Steel springs, except wire
3355	Aluminum rolling and drawing, nec	3494	Valves and pipe fittings
3356	Nonferrous rolling and drawing, nec	3495	Wire springs
3357	Nonferrous wire drawing & insulating	3496	Misc. fabricated wire products
336	Nonferrous Foundries	3497	Metal foil and leaf
3361	Aluminum foundries	3498	Fabricated pipe and fittings
3362	Brass, bronze, and copper foundries	3499	Fabricated metal products, nec
3369	Nonferrous foundries, nec		
339	Miscellaneous Primary Metal Products	35	MACHINERY, EXCEPT ELECTRICAL
3398	Metal heat treating	351	Engines and Turbines
3399	Primary metal products, nec	3511	Turbines and turbine generator sets
		3519	Internal combustion engines, nec
34	FABRICATED METAL PRODUCTS	352	Farm and Garden Machinery
341	Metal Cans and Shipping Containers	3523	Farm machinery and equipment
3411	Metal cans	3524	Lawn and garden equipment
3412	Metal barrels, drums, and pails	353	Construction and Related Machinery
342	Cutlery, Hand Tools, and Hardware	3531	Construction machinery
3421	Cutlery	3532	Mining machinery
3423	Hand and edge tools, nec	3533	Oil field machinery
3425	Hand saws and saw blades	3534	Elevators and moving stairways
3429	Hardware, nec	3535	Conveyors and conveying equipment
343	Plumbing and Heating, Except Electric	3536	Holsts, cranes, and monorails
3431	Metal sanitary ware	3537	Industrial trucks and tractors
3432	Plumbing fittings and brass goods	354	Metalworking Machinery
3433	Heating equipment, except electric	3541	Machine tools, metal cutting types
344	Fabricated Structural Metal Products	3542	Machine tools, metal forming types
3441	Fabricated structural metal	3544	Special dies, tools, jigs & fixtures
3442	Metal doors, sash, and trim	3545	Machine tool accessories
3443	Fabricated plate work (boiler shops)	3546	Power driven hand tools
3444	Sheet metal work	3547	Rolling mill machinery
3446	Architectural metal work	3549	Metalworking machinery, nec
3448	Prefabricated metal buildings	355	Special Industry Machinery
3449	Miscellaneous metal work	3551	Food products machinery

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STANDARD INDUSTRIAL CLASSIFICATION

<i>Code</i>	<i>Short Title</i>	<i>Code</i>	<i>Short Title</i>
3552	Textile machinery	364	Electric Lighting and Wiring Equipment
3553	Woodworking machinery	3641	Electric lamps
3554	Paper industries machinery	3643	Current-carrying wiring devices
3555	Printing trades machinery	3644	Noncurrent-carrying wiring devices
3559	Special industry machinery, nec	3645	Residential lighting fixtures
356	General Industrial Machinery	3646	Commercial lighting fixtures
3561	Pumps and pumping equipment	3647	Vehicular lighting equipment
3562	Ball and roller bearings	3648	Lighting equipment, nec
3563	Air and gas compressors	365	Radio and TV Receiving Equipment
3564	Blowers and fans	3651	Radio and TV receiving sets
3565	Industrial patterns	3652	Phonograph records
3566	Speed changers, drives, and gears	366	Communication Equipment
3567	Industrial furnaces and ovens	3661	Telephone and telegraph apparatus
3568	Power transmission equipment, nec	3662	Radio and TV communication equipment
3569	General industrial machinery, nec	367	Electronic Components and Accessories
357	Office and Computing Machines	3671	Electron tubes, receiving type
3572	Typewriters	3672	Cathode ray television picture tubes
3573	Electronic computing equipment	3673	Electron tubes, transmitting
3574	Calculating and accounting machines	3674	Semiconductors and related devices
3576	Scales and balances, exc. laboratory	3675	Electronic capacitors
3579	Office machines, nec	3676	Electronic resistors
358	Refrigeration and Service Machinery	3677	Electronic coils and transformers
3581	Automatic merchandising machines	3678	Electronic connectors
3582	Commercial laundry equipment	3679	Electronic components, nec
3585	Refrigeration and heating equipment	369	Misc. Electrical Equipment & Supplies
3586	Measuring and dispensing pumps	3691	Storage batteries
3589	Service industry machinery, nec	3692	Primary batteries, dry and wet
359	Misc. Machinery, Except Electrical	3693	X-ray apparatus and tubes
3592	Carburetors, pistons, rings, valves	3694	Engine electrical equipment
3599	Machinery, except electrical, nec	3699	Electrical equipment & supplies, nec
36	ELECTRIC AND ELECTRONIC EQUIPMENT	37	TRANSPORTATION EQUIPMENT
361	Electric Distributing Equipment	371	Motor Vehicles and Equipment
3612	Transformers	3711	Motor vehicles and car bodies
3613	Switchgear and switchboard apparatus	3713	Truck and bus bodies
362	Electrical Industrial Apparatus	3714	Motor vehicle parts and accessories
3621	Motors and generators	3715	Truck trailers
3622	Industrial controls	372	Aircraft and Parts
3623	Welding apparatus, electric	3721	Aircraft
3624	Carbon and graphite products	3724	Aircraft engines and engine parts
3629	Electrical industrial apparatus, nec	3728	Aircraft equipment, nec
363	Household Appliances	373	Ship and Boat Building and Repairing
3631	Household cooking equipment	3731	Ship building and repairing
3632	Household refrigerators and freezers	3732	Boat building and repairing
3633	Household laundry equipment	374	Railroad Equipment
3634	Electric housewares and fans	3743	Railroad equipment
3635	Household vacuum cleaners	375	Motorcycles, Bicycles, and Parts
3636	Sewing machines	3751	Motorcycles, bicycles, and parts
3639	Household appliances, nec	376	Guided Missiles, Space Vehicles, Parts
		3761	Guided missiles and space vehicles

LIST OF SHORT SIC TITLES

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<i>Code</i>	<i>Short Title</i>
3764	Space propulsion units and parts
3769	Space vehicle equipment, nec
379	Miscellaneous Transportation Equip- ment
3792	Travel trailers and campers
3795	Tanks and tank components
3799	Transportation equipment, nec.
38	INSTRUMENTS AND RELATED PRODUCTS
381	Engineering & Scientific Instruments
3811	Engineering & scientific instruments
382	Measuring and Controlling Devices
3822	Environmental controls
3823	Process control instruments
3824	Fluid meters and counting devices
3825	Instruments to measure electricity
3829	Measuring & controlling devices, nec
383	Optical Instruments and Lenses
3832	Optical instruments and lenses
384	Medical Instruments and Supplies
3841	Surgical and medical instruments
3842	Surgical appliances and supplies
3843	Dental equipment and supplies
385	Ophthalmic Goods
3851	Ophthalmic goods
386	Photographic Equipment and Supplies
3861	Photographic equipment and supplies
387	Watches, Clocks, and Watchcases
3873	Watches, clocks, and watchcases

<i>Code</i>	<i>Short Title</i>
39	MISCELLANEOUS MANUFACTURING INDUSTRIES
391	Jewelry, Silverware, and Plated Ware
3911	Jewelry, precious metal
3914	Silverware and plated ware
3915	Jewelers' materials & lapidary work
393	Musical Instruments
3931	Musical instruments
394	Toys and Sporting Goods
3942	Dolls
3944	Games, toys, and children's vehicles
3949	Sporting and athletic goods, nec
395	Pens, Pencils, Office and Art Supplies
3951	Pens and mechanical pencils
3952	Lead pencils and art goods
3953	Marking devices
3955	Carbon paper and inked ribbons
396	Costume Jewelry and Notions
3961	Costume jewelry
3962	Artificial flowers
3963	Buttons
3964	Needles, pins, and fasteners
399	Miscellaneous Manufactures
3991	Brooms and brushes
3993	Signs and advertising displays
3995	Burial caskets
3996	Hard surface floor coverings
3999	Manufacturing industries, nec

E. TRANSPORTATION AND PUBLIC UTILITIES

<i>Code</i>	<i>Short Title</i>
40	RAILROAD TRANSPORTATION
401	Railroads
4011	Railroads, line-haul operating
4013	Switching and terminal services
404	Railway Express Service
4041	Railway express service
41	LOCAL AND INTERURBAN PAS- SENGER TRANSIT
411	Local and Suburban Transportation
4111	Local and suburban transit
4119	Local passenger transportation, nec
412	Taxicabs
4121	Taxicabs
413	Intercity Highway Transportation
4131	Intercity highway transportation
414	Transportation Charter Service
4141	Local passenger charter service
4142	Charter service, except local

<i>Code</i>	<i>Short Title</i>
415	School Buses
4151	School buses
417	Bus Terminal and Service Facilities
4171	Bus terminal facilities
4172	Bus service facilities
42	TRUCKING AND WAREHOUSING
421	Trucking, Local and Long Distance
4212	Local trucking, without storage
4213	Trucking, except local
4214	Local trucking and storage
422	Public Warehousing
4221	Farm product warehousing and storage
4222	Refrigerated warehousing
4224	Household goods warehousing
4225	General warehousing and storage
4226	Special warehousing and storage, nec
423	Trucking Terminal Facilities
4231	Trucking terminal facilities

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STANDARD INDUSTRIAL CLASSIFICATION

<i>Code</i>	<i>Short Title</i>	<i>Code</i>	<i>Short Title</i>
43	U.S. POSTAL SERVICE	4722	Passenger transportation arrangement
431	U.S. Postal Service	4723	Freight transportation arrangement
4311	U.S. Postal Service	474	Rental of Railroad Cars
44	WATER TRANSPORTATION	4742	Railroad car rental with service
441	Deep Sea Foreign Transportation	4743	Railroad car rental without service
4411	Deep sea foreign transportation	478	Miscellaneous Transportation Services
442	Deep Sea Domestic Transportation	4782	Inspection and weighing services
4421	Noncontiguous area transportation	4783	Packing and crating
4422	Coastwise transportation	4784	Fixed facilities for vehicles, nec
4423	Intercoastal transportation	4789	Transportation services, nec
443	Great Lakes Transportation	48	COMMUNICATION
4431	Great Lakes transportation	481	Telephone Communication
444	Transportation on Rivers and Canals	4811	Telephone communication
4441	Transportation on rivers and canals	482	Telegraph Communication
445	Local Water Transportation	4821	Telegraph communication
4452	Ferries	483	Radio and Television Broadcasting
4453	Lighterage	4832	Radio broadcasting
4454	Towing and tugboat service	4833	Television broadcasting
4459	Local water transportation, nec	489	Communication Services, nec
446	Water Transportation Services	4899	Communication services, nec
4463	Marine cargo handling	49	ELECTRIC, GAS, AND SANITARY SERVICES
4464	Canal operation	491	Electric Services
4469	Water transportation services, nec	4911	Electric services
45	TRANSPORTATION BY AIR	492	Gas Production and Distribution
451	Certificated Air Transportation	4922	Natural gas transmission
4511	Certificated air transportation	4923	Gas transmission and distribution
452	Noncertificated Air Transportation	4924	Natural gas distribution
4521	Noncertificated air transportation	4925	Gas production and/or distribution
458	Air Transportation Services	493	Combination Utility Services
4582	Airports and flying fields	4931	Electric and other services combined
4583	Airport terminal services	4932	Gas and other services combined
46	PIPE LINES, EXCEPT NATURAL GAS	4939	Combination utility services, nec
461	Pipe Lines, Except Natural Gas	494	Water Supply
4612	Crude petroleum pipe lines	4941	Water supply
4613	Refined petroleum pipe lines	495	Sanitary Services
4619	Pipe lines, nec	4952	Sewerage systems
47	TRANSPORTATION SERVICES	4953	Refuse systems
471	Freight Forwarding	4959	Sanitary services, nec
4712	Freight forwarding	496	Steam Supply
472	Arrangement of Transportation	4961	Steam supply
		497	Irrigation Systems
		4971	Irrigation systems

LIST OF SHORT SIC TITLES

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F. WHOLESALE TRADE

<i>Code</i>	<i>Short Title</i>	<i>Code</i>	<i>Short Title</i>
50	WHOLESALE TRADE—DURABLE GOODS	51	WHOLESALE TRADE—NONDURABLE GOODS
501	Motor Vehicles & Automotive Equipment	511	Paper and Paper Products
5012	Automobiles and other motor vehicles	5111	Printing and writing paper
5013	Automotive parts and supplies	5112	Stationery supplies
5014	Tires and tubes	5113	Industrial & personal service paper
502	Furniture and Home Furnishings	512	Drugs, Proprietarys, and Sundries
5021	Furniture	5122	Drugs, proprietarys, and sundries
5023	Home furnishings	513	Apparel, Piece Goods, and Notions
503	Lumber and Construction Materials	5133	Piece goods
5031	Lumber, plywood and millwork	5134	Notions and other dry goods
5039	Construction materials, nec	5136	Men's clothing and furnishings
504	Sporting Goods, Toys, and Hobby Goods	5137	Women's and children's clothing
5041	Sporting and recreational goods	5139	Footwear
5042	Toys and hobby goods and supplies	514	Groceries and Related Products
5043	Photographic equipment and supplies	5141	Groceries, general line
505	Metals and Minerals, Except Petroleum	5142	Frozen foods
5051	Metals service centers and offices	5143	Dairy products
5052	Coal and other minerals and ores	5144	Poultry and poultry products
506	Electrical Goods	5145	Confectionery
5063	Electrical apparatus and equipment	5146	Fish and seafoods
5064	Electrical appliances, TV and radios	5147	Meats and meat products
5065	Electronic parts and equipment	5148	Fresh fruits and vegetables
507	Hardware, Plumbing & Heating Equipment	5149	Groceries and related products, nec
5072	Hardware	515	Farm-Product Raw Materials
5074	Plumbing & hydronic heating supplies	5152	Cotton
5075	Warm air heating & air conditioning	5153	Grain
5078	Refrigeration equipment and supplies	5154	Livestock
508	Machinery, Equipment, and Supplies	5159	Farm-product raw materials, nec
5081	Commercial machines and equipment	516	Chemicals and Allied Products
5082	Construction and mining machinery	5161	Chemicals and allied products
5083	Farm machinery and equipment	517	Petroleum and Petroleum Products
5084	Industrial machinery and equipment	5171	Petroleum bulk stations & terminals
5085	Industrial supplies	5172	Petroleum products, nec
5086	Professional equipment and supplies	518	Beer, Wine, and Distilled Beverages
5087	Service establishment equipment	5181	Beer and ale
5088	Transportation equipment & supplies	5182	Wines and distilled beverages
509	Miscellaneous Durable Goods	519	Miscellaneous Nondurable Goods
5093	Scrap and waste materials	5191	Farm supplies
5094	Jewelry, watches, & precious stones	5194	Tobacco and tobacco products
5099	Durable goods, nec	5198	Paints, varnishes, and supplies
		5199	Nondurable goods, nec

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STANDARD INDUSTRIAL CLASSIFICATION

G. RETAIL TRADE

<i>Code</i>	<i>Short Title</i>	<i>Code</i>	<i>Short Title</i>
52	BUILDING MATERIALS & GARDEN SUPPLIES	555	Boat Dealers
521	Lumber and Other Building Materials	5551	Boat dealers
5211	Lumber and other building materials	556	Recreation & Utility Trailer Dealers
523	Paint, Glass, and Wallpaper Stores	5561	Recreation & utility trailer dealers
5231	Paint, glass, and wallpaper stores	557	Motorcycle Dealers
525	Hardware Stores	5571	Motorcycle dealers
5251	Hardware stores	559	Automotive Dealers, nec
526	Retail Nurseries and Garden Stores	5599	Automotive dealers, nec
5261	Retail nurseries and garden stores		
527	Mobile Home Dealers	56	APPAREL AND ACCESSORY STORES
5271	Mobile home dealers	561	Men's & Boys' Clothing & Furnishings
		5611	Men's & boys' clothing & furnishings
53	GENERAL MERCHANDISE STORES	562	Women's Ready-to-Wear Stores
531	Department Stores	5621	Women's ready-to-wear stores
5311	Department stores	563	Women's Accessory and Specialty Stores
533	Variety Stores	5631	Women's accessory and specialty stores
5331	Variety stores	564	Children's and Infants' Wear Stores
539	Misc. General Merchandise Stores	5641	Children's and infants' wear stores
5399	Misc. general merchandise stores	565	Family Clothing Stores
		5651	Family clothing stores
54	FOOD STORES	566	Shoe Stores
541	Grocery Stores	5661	Shoe stores
5411	Grocery stores	568	Furriers and Fur Shops
542	Meat Markets and Freezer Provisioners	5681	Furriers and fur shops
5422	Freezer and locker meat provisioners	569	Miscellaneous Apparel & Accessories
5423	Meat and fish (seafood) markets	5699	Miscellaneous apparel & accessories
543	Fruit Stores and Vegetable Markets		
5431	Fruit stores and vegetable markets	57	FURNITURE AND HOME FURNISHINGS STORES
544	Candy, Nut, and Confectionery Stores	571	Furniture and Home Furnishings Stores
5441	Candy, nut, and confectionery stores	5712	Furniture stores
545	Dairy Products Stores	5713	Floor covering stores
5451	Dairy products stores	5714	Drapery and upholstery stores
546	Retail Bakeries	5719	Misc. home furnishings stores
5462	Retail bakeries—baking and selling	572	Household Appliance Stores
5463	Retail bakeries—selling only	5722	Household appliance stores
549	Miscellaneous Food Stores	573	Radio, Television, and Music Stores
5499	Miscellaneous food stores	5732	Radio and television stores
		5733	Music stores
55	AUTOMOTIVE DEALERS & SERVICE STATIONS		
551	New and Used Car Dealers	58	EATING AND DRINKING PLACES
5511	New and used car dealers	581	Eating and Drinking Places
552	Used Car Dealers	5812	Eating places
5521	Used car dealers	5813	Drinking places
553	Auto and Home Supply Stores		
5531	Auto and home supply stores	59	MISCELLANEOUS RETAIL
554	Gasoline Service Stations	591	Drug Stores and Proprietary Stores
5541	Gasoline service stations	5912	Drug stores and proprietary stores

LIST OF SHORT SIC TITLES

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<i>Code</i>	<i>Short Title</i>	<i>Code</i>	<i>Short Title</i>
592	Liquor Stores	596	Nonstore Retailers
5921	Liquor stores	5961	Mail order houses
593	Used Merchandise Stores	5962	Merchandising machine operators
5931	Used merchandise stores	5963	Direct selling organizations
594	Miscellaneous Shopping Goods Stores	598	Fuel and Ice Dealers
5941	Sporting goods and bicycle shops	5982	Fuel and ice dealers, nec
5942	Book stores	5983	Fuel oil dealers
5943	Stationery stores	5984	Liquefied petroleum gas dealers
5944	Jewelry stores	599	Retail Stores, nec
5945	Hobby, toy, and game shops	5992	Florists
5946	Camera & photographic supply stores	5993	Cigar stores and stands
5947	Gift, novelty, and souvenir shops	5994	News dealers and newsstands
5948	Luggage and leather goods stores	5999	Miscellaneous retail stores, nec
5949	Sewing, needlework, and piece goods		

H. FINANCE, INSURANCE, AND REAL ESTATE

<i>Code</i>	<i>Short Title</i>	<i>Code</i>	<i>Short Title</i>
60	BANKING	6125	State associations, noninsured, nec
601	Federal Reserve Banks	613	Agricultural Credit Institutions
6011	Federal Reserve banks	6131	Agricultural credit institutions
602	Commercial and Stock Savings Banks	614	Personal Credit Institutions
6022	State banks, Federal Reserve	6142	Federal credit unions
6023	State banks, not Fed. Reserve, FDIC	6143	State credit unions
6024	State banks, not Fed. Res., not FDIC	6144	Nondeposit industrial loan companies
6025	National banks, Federal Reserve	6145	Licensed small loan lenders
6026	National banks, not Fed. Res., FDIC	6146	Installment sales finance companies
6027	National banks, not FDIC	6149	Misc. personal credit institutions
6028	Private banks, not incorp., not FDIC	615	Business Credit Institutions
603	Mutual Savings Banks	6153	Short-term business credit
6032	Mutual savings banks, Federal Reserve	6159	Misc. business credit institutions
6033	Mutual savings banks, nec	616	Mortgage Bankers and Brokers
6034	Mutual savings banks, not FDIC	6162	Mortgage bankers and correspondents
604	Trust Companies, Nondeposit	6163	Loan brokers
6042	Nondeposit trusts, Federal Reserve		
6044	Nondeposit trusts, not FDIC	62	SECURITY, COMMODITY BROKERS & SERVICES
605	Functions Closely Related to Banking	621	Security Brokers and Dealers
6052	Foreign exchange establishments	6211	Security brokers and dealers
6054	Safe deposit companies	622	Commodity Contracts Brokers, Dealers
6055	Clearinghouse associations	6221	Commodity contracts brokers, dealers
6056	Corporations for banking abroad	623	Security and Commodity Exchanges
6059	Functions related to banking, nec	6231	Security and commodity exchanges
		628	Security and Commodity Services
61	CREDIT AGENCIES OTHER THAN BANKS	6281	Security and commodity services
611	Rediscount and Financing Institutions		
6112	Rediscounting, not for agricultural	63	INSURANCE CARRIERS
6113	Rediscounting, for agricultural	631	Life Insurance
612	Savings and Loan Associations	6311	Life insurance
6122	Federal savings & loan associations	632	Medical Service and Health Insurance
6123	State associations, insured	6321	Accident and health insurance
6124	State associations, noninsured, FHLB	6324	Hospital and medical service plans

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STANDARD INDUSTRIAL CLASSIFICATION

<i>Code</i>	<i>Short Title</i>
633	Fire, Marine, and Casualty Insurance
6331	Fire, marine, and casualty insurance
635	Surety Insurance
6351	Surety insurance
636	Title Insurance
6361	Title insurance
637	Pension, Health, and Welfare Funds
6371	Pension, health, and welfare funds
639	Insurance Carriers, nec
6399	Insurance carriers, nec
64	INSURANCE AGENTS, BROKERS & SERVICE
641	Insurance Agents, Brokers & Service
6411	Insurance agents, brokers & service
65	REAL ESTATE
651	Real Estate Operators and Lessors
6512	Nonresidential building operators
6513	Apartment building operators
6514	Dwelling operators, exc. apartments
6515	Mobile home site operators
6517	Railroad property lessors
6519	Real property lessors, nec
653	Real Estate Agents and Managers
6531	Real estate agents and managers

<i>Code</i>	<i>Short Title</i>
654	Title Abstract Offices
6541	Title abstract offices
655	Subdividers and Developers
6552	Subdividers and developers, nec
6553	Cemetery subdividers and developers
66	COMBINED REAL ESTATE, INSURANCE, ETC
661	Combined Real Estate, Insurance, etc
6611	Combined real estate, insurance, etc
67	HOLDING AND OTHER INVESTMENT OFFICES
671	Holding Offices
6711	Holding offices
672	Investment Offices
6722	Management investment, open-end
6723	Management investment, closed-end
6724	Unit investment trusts
6725	Face-amount certificate offices
673	Trusts
6732	Educational, religious, etc. trusts
6733	Trusts, nec
679	Miscellaneous Investing
6792	Oil royalty traders
6793	Commodity traders
6794	Patent owners and lessors
6799	Investors, nec

I. SERVICES

<i>Code</i>	<i>Short Title</i>
70	HOTELS AND OTHER LODGING PLACES
701	Hotels, Motels, and Tourist Courts
7011	Hotels, motels, and tourist courts
702	Rooming and Boarding Houses
7021	Rooming and boarding houses
703	Camps and Trailing Parks
7032	Sporting and recreational camps
7033	Trailing parks for transients
704	Membership-Basis Organization Hotels
7041	Membership-basis organization hotels
72	PERSONAL SERVICES
721	Laundry, Cleaning, & Garment Services
7211	Power laundries, family & commercial
7212	Garment pressing & cleaners' agents
7213	Linen supply
7214	Diaper service
7215	Coin-operated laundries and cleaning
7216	Dry cleaning plants, except rug

<i>Code</i>	<i>Short Title</i>
7217	Carpet and upholstery cleaning
7218	Industrial launderers
7219	Laundry and garment services, nec
722	Photographic Studios, Portrait
7221	Photographic studios, portrait
723	Beauty Shops
7231	Beauty shops
724	Barber Shops
7241	Barber shops
725	Shoe Repair and Hat Cleaning Shops
7251	Shoe repair and hat cleaning shops
726	Funeral Service and Crematories
7261	Funeral service and crematories
729	Miscellaneous Personal Services
7299	Miscellaneous personal services
73	BUSINESS SERVICES
731	Advertising
7311	Advertising agencies
7312	Outdoor advertising services

LIST OF SHORT SIC TITLES

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<i>Code</i>	<i>Short Title</i>
7313	Radio, TV, publisher representatives
7319	Advertising, nec
732	Credit Reporting and Collection
7321	Credit reporting and collection
733	Mailing, Reproduction, Stenographic
7331	Direct mail advertising services
7332	Blueprinting and photocopying
7333	Commercial photography and art
7339	Stenographic and reproduction, nec
734	Services to Buildings
7341	Window cleaning
7342	Disinfecting and exterminating
7349	Building maintenance services, nec
735	News Syndicates
7351	News syndicates
736	Personnel Supply Services
7361	Employment agencies
7362	Temporary help supply services
7369	Personnel supply services, nec
737	Computer and Data Processing Services
7372	Computer programming and software
7374	Data processing services
7379	Computer related services, nec
739	Miscellaneous Business Services
7391	Research & development laboratories
7392	Management and public relations
7393	Detective and protective services
7394	Equipment rental and leasing
7395	Photofinishing laboratories
7396	Trading stamp services
7397	Commercial testing laboratories
7399	Business services, nec
75	AUTO REPAIR, SERVICES, AND GARAGES
751	Automotive Rentals, Without Drivers
7512	Passenger car rental and leasing
7513	Truck rental and leasing
7519	Utility trailer rental
752	Automobile Parking
7523	Parking lots
7525	Parking structures
753	Automotive Repair Shops
7531	Top and body repair shops
7534	Tire retreading and repair shops
7535	Paint shops
7538	General automotive repair shops
7539	Automotive repair shops, nec
754	Automotive Services, Except Repair
7542	Car washes
7549	Automotive services, nec

<i>Code</i>	<i>Short Title</i>
76	MISCELLANEOUS REPAIR SERVICES
762	Electrical Repair Shops
7622	Radio and television repair
7623	Refrigeration service and repair
7629	Electrical repair shops, nec
763	Watch, Clock, and Jewelry Repair
7631	Watch, clock, and jewelry repair
764	Reupholstery and Furniture Repair
7641	Reupholstery and furniture repair
769	Miscellaneous Repair Shops
7692	Welding repair
7694	Armature rewinding shops
7699	Repair services, nec
78	MOTION PICTURES
781	Motion Picture Production & Services
7813	Motion picture production, except TV
7814	Motion picture production for TV
7819	Services allied to motion pictures
782	Motion Picture Distribution and Services
7823	Motion picture film exchanges
7824	Film or tape distribution for TV
7829	Motion picture distribution services
783	Motion Picture Theaters
7832	Motion picture theaters, ex drive-in
7833	Drive-in motion picture theaters
79	AMUSEMENT & RECREATION SERVICES
791	Dance Halls, Studios, and Schools
7911	Dance halls, studios, and schools
792	Producers, Orchestras, Entertainers
7922	Theatrical producers and services
7929	Entertainers & entertainment groups
793	Bowling and Billiard Establishments
7932	Billiard and pool establishments
7933	Bowling alleys
794	Commercial Sports
7941	Sports clubs and promoters
7948	Racing, including track operation
799	Misc. Amusement, Recreational Services
7992	Public golf courses
7993	Coin-operated amusement devices
7996	Amusement parks
7997	Membership sports & recreation clubs
7999	Amusement and recreation, nec
80	HEALTH SERVICES
801	Offices of Physicians
8011	Offices of physicians
802	Offices of Dentists
8021	Offices of dentists

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STANDARD INDUSTRIAL CLASSIFICATION

<i>Code</i>	<i>Short Title</i>
803	Offices of Osteopathic Physicians
8031	Offices of osteopathic physicians
804	Offices of Other Health Practitioners
8041	Offices of chiropractors
8042	Offices of optometrists
8049	Offices of health practitioners, nec
805	Nursing and Personal Care Facilities
8051	Skilled nursing care facilities
8059	Nursing and personal care, nec
806	Hospitals
8062	General medical & surgical hospitals
8063	Psychiatric hospitals
8069	Specialty hospitals, exc. psychiatric
807	Medical and Dental Laboratories
8071	Medical laboratories
8072	Dental laboratories
808	Outpatient Care Facilities
8081	Outpatient care facilities
809	Health and Allied Services, nec
8091	Health and allied services, nec

81 LEGAL SERVICES

811 Legal Services
8111 Legal services

82 EDUCATIONAL SERVICES

821 Elementary and Secondary Schools
8211 Elementary and secondary schools
822 Colleges and Universities
8221 Colleges and universities, nec
8222 Junior colleges
823 Libraries and Information Centers
8231 Libraries and information centers
824 Correspondence and Vocational Schools
8241 Correspondence schools
8243 Data processing schools
8244 Business and secretarial schools
8249 Vocational schools, nec
829 Schools & Educational Services, nec
8299 Schools & educational services, nec

83 SOCIAL SERVICES

832 Individual and Family Services
8321 Individual and family services
833 Job Training and Related Services

<i>Code</i>	<i>Short Title</i>
8331	Job training and related services
835	Child Day Care Services
8351	Child day care services
836	Residential Care
8361	Residential care
839	Social Services, nec
8399	Social services, nec

84 MUSEUMS, BOTANICAL, ZOOLOGICAL GARDENS

841 Museums and Art Galleries
8411 Museums and art galleries
842 Botanical and Zoological Gardens
8421 Botanical and zoological gardens

86 MEMBERSHIP ORGANIZATIONS

861 Business Associations
8611 Business associations
862 Professional Organizations
8621 Professional organizations
863 Labor Organizations
8631 Labor organizations
864 Civic and Social Associations
8641 Civic and social associations
865 Political Organizations
8651 Political organizations
866 Religious Organizations
8661 Religious organizations
869 Membership Organizations, nec
8699 Membership organizations, nec

88 PRIVATE HOUSEHOLDS

881 Private Households
8811 Private households

89 MISCELLANEOUS SERVICES

891 Engineering & Architectural Services
8911 Engineering & architectural services
892 Noncommercial Research Organizations
8922 Noncommercial research organizations
893 Accounting, Auditing & Bookkeeping
8931 Accounting, auditing & bookkeeping
899 Services, nec
8999 Services, nec

LIST OF SHORT SIC TITLES

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J. PUBLIC ADMINISTRATION

<i>Code</i>	<i>Short Title</i>	<i>Code</i>	<i>Short Title</i>
91	EXECUTIVE, LEGISLATIVE, AND GENERAL	944	Admin. of Social & Manpower Programs
911	Executive Offices	9441	Admin. of social & manpower programs
9111	Executive offices	945	Administration of Veterans' Affairs
912	Legislative Bodies	9451	Administration of veterans' affairs
9121	Legislative bodies		
913	Executive and Legislative Combined	95	ENVIRONMENTAL QUALITY AND HOUSING
9131	Executive and legislative combined	951	Environmental Quality
919	General Government, nec	9511	Air, water & solid waste management
9199	General government, nec	9512	Land, mineral, wildlife conservation
		953	Housing and Urban Development
92	JUSTICE, PUBLIC ORDER, AND SAFETY	9531	Housing programs
921	Courts	9532	Urban and community development
9211	Courts		
922	Public Order and Safety	96	ADMINISTRATION OF ECONOMIC PROGRAMS
9221	Police protection	961	Admin. of General Economic Programs
9222	Legal counsel and prosecution	9611	Admin. of general economic programs
9223	Correctional institutions	962	Regulation, Admin. of Transportation
9224	Fire protection	9621	Regulation, admin. of transportation
9229	Public order and safety, nec	963	Regulation, Admin. of Utilities
		9631	Regulation, admin. of utilities
93	FINANCE, TAXATION & MONETARY POLICY	964	Regulation of Agricultural Marketing
931	Finance, Taxation & Monetary Policy	9641	Regulation of agricultural marketing
9311	Finance, taxation & monetary policy	965	Regulation Misc. Commercial Sectors
		9651	Regulation misc. commercial sectors
94	ADMINISTRATION OF HUMAN RESOURCES	966	Space Research and Technology
941	Admin. of Educational Programs	9661	Space research and technology
9411	Admin. of educational programs		
943	Admin. of Public Health Programs	97	NATIONAL SECURITY AND INTL. AFFAIRS
9431	Admin. of public health programs	971	National Security
		9711	National security
		972	International Affairs
		9721	International affairs

K. NONCLASSIFIABLE ESTABLISHMENTS

<i>Code</i>	<i>Short Title</i>
99	NONCLASSIFIABLE ESTABLISHMENTS
999	Nonclassifiable Establishments
9999	Nonclassifiable establishments

Appendix C—Section I

Relation of 1972 to 1967 SIC Industries Showing Only Changes From 1967

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)

1972 industry		1967 industry	
Code	Short title	Code	Short title
A. AGRICULTURE, FORESTRY, AND FISHING			
0111	Wheat.....	Part 0113	Cash grains
0112	Rice.....		
0115	Corn.....		
0116	Soybeans.....		
0119	Cash grains, nec.....	Part 0113	Cash grains
	Cash grains, nec..... [excludes wheat, rice, corn, and soybeans]		
	Flax and mustard seed.....	Part 0119	Field crops, nec
0131	Cotton.....	0112	Cotton
0132	Tobacco.....	0114	Tobacco
0133	Sugar crops.....	Part 0119	Field crops, nec
0134	Irish potatoes.....		
0139	Field crops, except cash grains, nec..... [excludes flax and mustard seed]		
0161	Vegetables and melons.....	0123	Vegetables
0171	Berry crops.....	0122	Fruits and tree nuts
0172	Grapes.....		
0173	Tree nuts.....		
0174	Citrus fruits.....		
0175	Deciduous tree fruits.....	0192	Horticultural specialties
0179	Fruits and tree nuts, nec.....		
0181	Ornamental nursery products.....		
0182	Food crops grown under cover.....		
0189	Horticultural specialties, nec.....	Part 0141	General farms
0191	General farms, primarily crop.....		
0211	Beef cattle feedlots.....	Part 0135	Beef cattle
	On own account.....		
	On contract basis.....	Part 0729	Animal husbandry services, nec

See footnotes at end of table.

RELATION OF 1972 TO 1967 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
	A. AGRICULTURE, FORESTRY, AND FISHING—Continued		
0212	Beef cattle, except feedlots.....	Part 0135	Beef cattle
0218	Hogs		
	On own account.....	0136	Hogs
	On contract basis.....	Part 0729	Animal husbandry services, nec
0214	Sheep and goats		
	On own account.....	0139	Livestock, nec
	On contract basis.....	Part 0729	Animal husbandry services, nec
0219	General livestock, nec.....	Part 0141	General farms
0241 ¹	Dairy farms.....	0132	Dairies
0251	Broiler, fryer, and roaster chickens		
	Broiler.....	0133	Broiler chickens
	Fryer and roaster.....	Part 0134	Poultry, except broiler chickens
0252	Chicken eggs.....	Part 0134	Poultry, except broiler chickens
0253	Turkeys and turkey eggs.....	Part 0134	Poultry, except broiler chickens
0254 ¹	Poultry hatcheries.....	0723	Poultry hatcheries
0259	Poultry and eggs, nec		
	Poultry, nec.....	Part 0134	Poultry, except broiler chickens
	[excludes fryer and roaster chickens, chicken eggs, and turkeys and turkey eggs]		
	General poultry farms.....	Part 0141	General farms
0271	Fur-bearing animals and rabbits.....	Part 0193	Animal specialties
0272	Horses and other equines.....	Part 0193	Animal specialties
0279	Animal specialties, nec		
	Animal specialties, nec.....	Part 0193	Animal specialties
	[excludes fur-bearing animals, rab- bits, equines]		
	Agricultural production, nec.....	0199	Agricultural production, nec
	Worms.....	Part 0729	Animal husbandry services, nec
	Fish and frog farms.....	Part 0989	Fish hatcheries, farms & preserves
0291	General farms, primarily livestock.....	Part 0141	General farms
0711	Soil preparation services.....	Part 0719	Agricultural services, nec
0721	Crop planting and protection.....	Part 0719	Agricultural services, nec
0722	Crop harvesting		
	Corn and hay harvesting & combining.....	Part 0714	Corn shelling, hay baling, threshing
	Other.....	Part 0719	Agricultural services, nec
0723	Crop preparation services for market		
	Grist mills.....	0713	Grist mills
	Corn shelling and hay cubing.....	Part 0714	Corn shelling, hay baling, threshing
	Sorting, sizing, and packing of fruits and vegetables	0715	Packing of fruits and vegetables
	Other crop preparation services.....	Part 0719	Agricultural services, nec
0724 ¹	Cotton ginning.....	0712	Cotton ginning and compressing
0729	General crop services.....	Part 0719	Agricultural services, nec

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
A. AGRICULTURE, FORESTRY, AND FISHING—Continued			
0741	Veterinary services, farm livestock	Part 0722	Veterinarians and animal hospitals
0742	Veterinary services, specialties		
	[excludes boarding kennels]		
0751	Livestock services, exc. specialties	Part 0729	Animal husbandry services, nec
	Livestock services, except specialties ..		
	[excludes feedlots and auctioning]		
	Dairy herd improvement associations ..	Part 8611	Business associations
0752	Animal specialty services		
	Boarding kennels	Part 0722	Veterinarians and animal hospitals
	Animal services, nec	Part 0729	Animal husbandry services, nec
	[excludes feedlots, auctioning, worms, and livestock services]		
0761	Farm labor contractors	Part 0719	Agricultural services, nec
0762	Farm management services		
0781	Landscape counseling and planning		
0782	Lawn and garden services	0731	Horticultural services
0783	Ornamental shrub and tree services		
0821	Forest nurseries and seed gathering	0822	Forest nurseries
0849	Gathering of forest products, nec	0823	Tree seed gathering and extracting
		0842	Gathering barks & gums, except pine
		0861	Gathering of forest products, nec
0919	Miscellaneous marine products	0914	Whale products
0921	Fish hatcheries and preserves	0919	Miscellaneous marine products
	[excludes fish and frog farms]	Part 0989	Fish hatcheries, farms, and preserves
0971	Hunting, trapping, game propagation	0741	Hunting, trapping, game propagation
B. MINING			
1041	Gold ores	1042	Lode gold
		1043	Placer gold
1061	Ferroalloy ores, except vanadium	1062	Manganese ores
		1064	Tungsten ores
1099	Metal ores, nec	1069	Ferroalloy ores, nec
		1093	Titanium ores
1211	Bituminous coal and lignite	1099	Metal ores, nec
		1211	Bituminous coal
1311	Crude petroleum and natural gas	1212	Lignite
	[excludes sulfur extracted from sour gas]	Part 1311	Crude petroleum and natural gas

See footnotes at end of table.

RELATION OF 1972 TO 1967 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
B. MINING¹—Continued			
1459	Clay and related minerals, nec.....	1456	Feldspar
		1459	Clay and related minerals, nec
		1493	Mica
		1494	Native asphalt and bitumens
1499	Nonmetallic minerals, nec.....	1495	Pumice and pumicite
		1497	Natural abrasives, except sand
		1498	Peat
		1499	Nonmetallic minerals, nec
C. CONSTRUCTION¹			
1521	Single-family housing construction.....	Part 1511	General building contractors
1522	Residential construction, nec.....		
1531 ¹	Operative builders.....	6561	Operative builders
1541	Industrial buildings and warehouses.....	Part 1511	General building contractors
1542	Nonresidential construction, nec.....		
1611	Highway and street construction..... [excludes sewer, water, fence and swimming pools]	Part 1611	Highway and street construction
1622	Bridge, tunnel & elevated highway.....	Part 1621	Heavy construction, nec
1623	Water, sewer, and utility lines Pumping station contractors.....	Part 1511	General building contractors
	Sewer and waterworks contractors.....	Part 1611	Highway and street construction
	Pipeline, communication, and power-line contractors	Part 1621	Heavy construction, nec
1629	Heavy construction, nec Heavy industrial facilities.....	Part 1511	General building contractors
	Except heavy industrial facilities.....	Part 1621	Heavy construction, nec
1742	Plastering, drywall, and insulation Plastering and lathing.....	1742	Plastering and lathing
	Acoustical, insulation, and drywall contractors	Part 1799	Special trade contractors, nec
1796	Installing building equipment, nec Installing building equipment, nec.....	1796	Installing building equipment, nec
	Installing machinery and equipment.....	Part 1799	Special trade contractors, nec
1799	Special trade contractors, nec Swimming pool and fence contractors..	Part 1611	Highway and street construction
	Ornamental metal work.....	1792	Ornamental metal work
	Special trade contractors..... [excludes acoustical, insulation and drywall contractors and machinery installation]	Part 1799	Special trade contractors, nec

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
D. MANUFACTURING			
2011	Meat packing plants..... [excludes slaughter of nonfood ani- mals; excludes canned baby food meats]	Part 2011	Meat packing plants
2013	Sausages and other prepared meats..... [excludes canned baby food meats]	Part 2013	Sausages and other prepared meats
2016	Poultry dressing plants.....	2015	Poultry dressing plants
2017	Poultry and egg processing.....		
2032	Canned specialties	Part 2011	Meat packing plants
	Baby food meats.....		
	Baby food meats.....		
	Except baby food meats.....	Part 2013	Sausage and other prepared meats
2037	Frozen fruits and vegetables.....	2032	Canned specialties
2038	Frozen specialties.....	2037	Frozen fruits and vegetables
2047	Dog, cat, and other pet food	Part 2011	Meat packing plants
	From nonfood animals slaughtered in the same plant		
	Other.....	Part 2042	Prepared feeds for animals and fowls
2048	Prepared feeds, nec..... [excludes pet food]	Part 2042	Prepared feeds for animals and fowls
2065 ¹	Confectionery products.....	2071	Confectionery products
2066 ¹	Chocolate and cocoa products.....	2072	Chocolate and cocoa products
2067 ¹	Chewing gum.....	2073	Chewing gum
2074 ¹	Cottonseed oil mills.....	2091	Cottonseed oil mills
2075 ¹	Soybean oil mills.....	2092	Soybean oil mills
2076 ¹	Vegetable oil mills, nec.....	2093	Vegetable oil mills, nec
2077 ¹	Animal and marine fats and oils.....	2094	Animal and marine fats and oils
2079 ¹	Shortening and cooking oils.....	2096	Shortening and cooking oils
2091 ¹	Canned and cured seafoods.....	2031	Canned and cured sea foods
2092 ¹	Fresh or frozen packaged fish.....	2036	Fresh or frozen packaged fish
2257	Circular knit fabric mills.....	2256	Knit fabric mills
2258	Warp knit fabric mills.....		
2297	Nonwoven fabrics.....	Part 2299	Textile goods, nec
2299	Textile goods, nec	2297	Scouring and combing plants
	Scouring and combing.....		
	Except nonwoven fabrics.....	Part 2299	Textile goods, nec
2426	Hardwood dimension and flooring	2426	Hardwood dimension and flooring
	Except wood furniture frames.....		
	Wood furniture frames.....	Part 2512	Upholstered household furniture
2431	Millwork.....	Part 2431	Millwork
	[excludes kitchen cabinets to be built-in]		

See footnotes at end of table.

RELATION OF 1972 TO 1967 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
	D. MANUFACTURING—Continued		
2434	Wood kitchen cabinets		
	To be built-in.....	Part 2431	Millwork
	Other.....	Part 2511	Wood household furniture
2435	Hardwood veneer and plywood.....	2432	Veneer and plywood
2436	Softwood veneer and plywood.....		
2439	Structural wood members, nec.....	Part 2433	Prefabricated wood structures
2448	Wood pallets and skids.....	Part 2499	Wood products, nec
		2442	Wirebound boxes and crates
2449	Wood containers, nec.....	2443	Veneer and plywood containers
		2445	Cooperage
2451	Mobile homes.....	Part 3791	Trailer coaches
2452	Prefabricated wood buildings.....	Part 2433	Prefabricated wood structures
2492	Particleboard.....		
2499	Wood products, nec.....		
	[excludes pallets, skids, and particleboard]	Part 2499	Wood products, nec
2511	Wood household furniture.....	Part 2511	Wood household furniture
	[excludes television, radio, phonograph and sewing machine cabinets and kitchen cabinets]		
2512	Upholstered household furniture.....	Part 2512	Upholstered household furniture
	[excludes wood furniture frames]		
2517	Wood TV and radio cabinets.....	Part 2511	Wood household furniture
2648	Stationery products.....	Part 2649	Converted paper products, nec
2649	Converted paper products, nec		
	Wallpaper.....	2644	Wallpaper
	Other.....	Part 2649	Converted paper products, nec
	[excludes stationery and related items]		
2751	Commercial printing, letterpress.....	Part 2751	Commercial printing, ex. lithographic
2752	Commercial printing, lithographic.....	Part 2752	Commercial printing, lithographic
	[excludes lithographic plates]		
2754	Commercial printing, gravure.....	Part 2751	Commercial printing, ex. lithographic
2795	Lithographic platemaking services.....	Part 2752	Commercial printing, lithographic
2819	Industrial inorganic chemicals, nec		
	Sulfur extracted from sour gas.....	Part 1311	Crude petroleum and natural gas
	Industrial inorganic chemicals.....	Part 2819	Industrial inorganic chemicals, nec
	[excludes phosphoric acid and ammonium phosphate; household bleaches; nitric acid; anhydrous ammonia and other nitrogenous fertilizer materials]		

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIO industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 Industry		1987 Industry	
Code	Short title	Code	Short title
	D. MANUFACTURING—Continued		
2821	Plastics materials and resins..... [excludes adhesives; custom com- pounding of resins; and sheets, rods, and similar basic forms]	Part 2821	Plastics materials and resins
2842	Polishes and sanitation goods Household bleaches..... Except household bleaches..... [excludes pesticidal preparations]	Part 2819 Part 2842	Industrial inorganic chemicals, nec Polishes and sanitation goods
2851	Paints and allied products..... [excludes calking compounds]	Part 2851	Paints and allied products
2865	Cyclic crudes and intermediates.....	2815	Cyclic intermediates and crudes
2869	Industrial organic chemicals, nec..... [excludes urea]	Part 2818	Industrial organic chemicals, nec
2873	Nitrogenous fertilizers Urea..... Anhydrous ammonia, nitric acid, and other nitrogenous fertilizer ma- terials	Part 2818 Part 2819	Industrial organic chemicals, nec Industrial inorganic chemicals, nec
	Natural organic fertilizers ex. compost.	Part 2871	Fertilizers
2874	Phosphatic fertilizers Phosphoric acid and diammonium phosphate Except phosphoric acid, etc.....	Part 2819 Part 2871	Industrial inorganic chemicals, nec Fertilizers
2875	Fertilizers, mixing only.....	2872	Fertilizers, mixing only
2879	Agricultural chemicals, nec Household pesticidal preparations..... Except household pesticidal prepara- tions	Part 2842 2879	Polishes and sanitation goods Agricultural chemicals, nec
2891	Adhesives and sealants Adhesives from plastics resins pro- duced in the same establishment Calking compounds..... Adhesives..... Sealants, nec..... Linoleum and tile cement..... Rubber cement.....	Part 2821 Part 2851 Part 2891 Part 2899 Part 2952 Part 3069	Plastics materials and resins Paints and allied products Adhesives and gelatin Chemical preparations, nec Asphalt felts and coatings Fabricated rubber products, nec
2899	Chemical preparations, nec Gelatin and sizes..... Except gelatin and sizes..... [excludes sealants]	Part 2891 Part 2899	Adhesives and gelatin Chemical preparations, nec
2911	Petroleum refining..... [excludes rerefining of oils and greases]	Part 2911	Petroleum refining

See footnotes at end of table.

RELATION OF 1972 TO 1967 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
	D. MANUFACTURING—Continued		
2952	Asphalt felts and coatings..... [excludes linoleum and tile cement]	Part 2952	Asphalt felts and coatings
2992	Lubricating oils and greases Rerefining of oils and greases..... Other.....	Part 2911 2992	Petroleum refining Lubricating oils and greases
3021	Rubber and plastics footwear Rubber..... Plastics.....	3021 Part 3079	Rubber footwear Miscellaneous plastics products
3041	Rubber and plastics hose and belting Rubber..... Plastics.....	Part 3069 Part 3079	Fabricated rubber products, nec Miscellaneous plastics products
3069	Fabricated rubber products, nec..... [excludes rubber cement, rubber packing, and rubber hose and belting]	Part 3069	Fabricated rubber products, nec
3079	Miscellaneous plastics products Rod, sheet, etc., from resins produced in the same plant; custom com- pounding of purchased resins; re- generated cellulosic products, ex- cept rayon Miscellaneous plastics products..... [excludes plastics footwear and plastics hose and belting]	Part 2821 Part 3079	Plastics materials and resins Miscellaneous plastics products
3143	Men's footwear, except athletic.....	3141	Shoes, except rubber
3144	Women's footwear, except athletic.....		
3149	Footwear, except rubber, nec.....		
3199	Leather goods, nec Belting..... [excludes leather packing] Except belting.....	Part 3121 3199	Industrial leather belting Leather goods, nec
3292	Asbestos products Asbestos products..... Asbestos insulation.....	3292 Part 3293	Asbestos products Gaskets and insulations
3293	Gaskets, packing and sealing devices Rubber packing..... Leather packing..... Gaskets, all materials, and packing, nec Metal packing.....	Part 3069 Part 3121 Part 3293	Fabricated rubber products, nec Industrial leather belting Gaskets and insulations
3295	Minerals, ground or treated.....	Part 3599 3295	Misc. machinery, except electrical Minerals, ground or treated
3324	Steel investment foundries.....	3323	Steel foundries
3325	Steel foundries, nec.....		

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
D. MANUFACTURING—Continued			
3353	Aluminum sheet, plate, and foil.....	3352	Aluminum rolling and drawing
3354	Aluminum extruded products.....		
3355	Aluminum rolling and drawing, nec.....		
3398	Metal heat treating.....	3399	Primary metal products, nec
3399	Primary metal products, nec.....		
3412 ¹	Metal barrels, drums, and pails.....		
3433	Heating equipment, except electric..... [excludes warm air furnaces]	3491	Metal barrels, drums, and pails
		Part 3433	Heating equipment, except electric
3448	Prefabricated metal buildings.....	3449	Miscellaneous metal work
3449	Miscellaneous metal work.....		
3462 ¹	Iron and steel forgings.....		
3463 ¹	Nonferrous forgings.....	3391	Iron and steel forgings
3465	Automotive stampings.....	3392	Nonferrous forgings
3466	Crowns and closures.....	3461	Metal stampings
3469	Metal stampings, nec.....		
3482 ¹	Small arms ammunition.....		
3483 ¹	Ammunition, exc. for small arms, nec....	1961	Small arms ammunition
3484 ¹	Small arms.....	1929	Ammunition, exc. for small arms, nec
		1951	Small arms
3489	Ordnance and accessories, nec.....	1911	Guns, howitzers, and mortars
3495	Wire springs.....	1999	Ordnance and accessories, nec
3496	Misc. fabricated wire products.....	3481	Misc. fabricated wire products
3499	Fabricated metal products, nec.....		
3523	Farm machinery and equipment Except garden tractors and lawn and garden equipment Farm trailers and wagons.....		
3524	Lawn and garden equipment.....	3492	Safes and vaults
3531	Construction machinery Except well point systems.....	3496	Collapsible tubes
	Well point systems.....	3499	Fabricated metal products, nec
3533	Oil field machinery..... [excludes well point systems]	Part 3522	Farm machinery
3536	Holsts, cranes, and monorails Except automatic stacking machines..	Part 3799	Transportation equipment, nec
	Automatic stacking machines.....	Part 3522	Farm machinery
3537	Industrial trucks and tractors..... [excludes automatic stacking machines]	3531	Construction machinery
		Part 3533	Oil field machinery
		Part 3533	Oil field machinery
		3536	Holsts, cranes, and monorails
		Part 3537	Industrial trucks and tractors
		Part 3537	Industrial trucks and tractors

See footnotes at end of table.

RELATION OF 1972 TO 1967 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 Industry		1967 Industry	
Code	Short title	Code	Short title
D. MANUFACTURING—Continued			
3541	Machine tools, metal cutting types		
	Machine tools.....	3541	Machine tools, metal cutting types
	Auto maintenance equipment, metal cutting types	Part 3548	Metalworking machinery, nec
3546	Power driven hand tools.....	Part 3548	Metalworking machinery, nec
3547	Rolling mill machinery.....		
3549	Metalworking machinery, nec..... [excludes auto maintenance equipment, metal cutting types]		
3561	Pumps and pumping equipment.....	Part 3561	Pumps and compressors
3562	Ball and roller bearings		
	Bearings and parts.....	3562	Ball and roller bearings
	Mounted bearings.....	Part 3566	Power transmission equipment
3563	Air and gas compressors.....	Part 3561	Pumps and compressors
3566	Speed changers, drives, and gears.....	Part 3566	Power transmission equipment
3568	Power transmission equipment, nec..... [excludes mounted ball and roller bearings]		
3574	Calculating and accounting machines..... [excludes voting machines and ticket counting machines]	Part 3574	Calculating and accounting machines
3579	Office machines, nec		
	Voting machines and ticket counting machines	Part 3574	Calculating and accounting machines
	Except voting machines and ticket counting machines	3579	Office machines, nec
3582	Commercial laundry equipment..... [excludes coin-operated washers and dryers]	Part 3582	Commercial laundry equipment
3585	Refrigeration and heating equipment		
	Warm air heating equipment.....	Part 3433	Heating equipment, except electric
	Except warm air heating equipment..	3585	Refrigeration machinery
3592	Carburetors, pistons, rings, valves.....	Part 3599	Misc. machinery, except electrical
3599	Machinery, except electrical, nec..... [excludes packing, carburetors, pistons, rings, and valves]		
3612	Transformers		
	Instrument transformers.....	Part 3611	Electric measuring instruments
	Except instrument transformers.....	3612	Transformers
3633	Household laundry equipment		
	Coin-operated washers and dryers....	Part 3582	Commercial laundry equipment
	Except coin-operated washers, etc....	3633	Household laundry equipment

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 Industry		1967 Industry	
Code	Short title	Code	Short title
D. MANUFACTURING—Continued			
3645	Residential lighting fixtures.....	3642	Lighting fixtures
3646	Commercial lighting fixtures.....		
3647	Vehicular lighting equipment.....		
3648	Lighting equipment, nec.....		
3662	Radio and TV communication equipment	Part 1941	Sighting and fire control equipment
	Sighting and fire control equipment, electronic		
	Except sighting and fire control equipment, electronic	3662	Radio and TV communication equipment
3675	Electronic capacitors.....	3679	Electronic components, nec
3676	Electronic resistors.....		
3677	Electronic coils and transformers.....		
3678	Electronic connectors.....		
3679	Electronic components, nec.....	3711	Motor vehicles
3711	Motor vehicles and car bodies.....		
3712	Truck and bus bodies.....	3712	Passenger car bodies
	(excludes demountable cargo containers)	Part 3713	Truck and bus bodies
3715	Truck trailers	Part 3713	Truck and bus bodies
	Demountable cargo containers.....		
	Truck trailers.....	3715	Truck trailers
3724	Aircraft engines and engine parts.....	Part 3722	Aircraft engines and engine parts
3728	Aircraft equipment, nec	3723	Aircraft propellers and parts
	Propellers and parts.....		
	Except propellers and parts.....	Part 3729	Aircraft equipment, nec
	(excludes space vehicle equipment)	3741	Locomotives and parts
3743	Railroad equipment.....		
3751	Motorcycles, bicycles, and parts.....	3742	Railroad and street cars
	(excludes golf carts and other similar personnel carriers)	Part 3751	Motorcycles, bicycles, and parts
3761 ¹	Guided missiles and space vehicles.....	1925	Complete guided missiles
3764	Space propulsion units and parts.....	Part 3722	Aircraft engines and engine parts
3769	Space vehicle equipment, nec.....	Part 3729	Aircraft equipment, nec
3792	Travel trailers and campers	Part 3791	Trailer coaches
	Except folding tent trailers.....		
	(excludes mobile homes)	Part 3799	Transportation equipment, nec
	Folding tent trailers.....		
3795 ¹	Tanks and tank components.....	1931	Tanks and tank components

See footnotes at end of table.

RELATION OF 1972 TO 1967 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
D. MANUFACTURING—Continued			
3799	Transportation equipment, nec Golf carts and other similar personnel carriers	Part 3751	Motorcycles, bicycles, and parts
	Transportation equipment, nec..... [excludes farm trailers and wagons and folding tent trailers]	Part 3799	Transportation equipment, nec
3823	Process control instruments.....	Part 3821	Mechanical measuring devices
3824	Fluid meters and counting devices.....		
3825	Instruments to measure electricity..... [excludes instrument transformers]	Part 3611	Electric measuring instruments
3829	Measuring & controlling devices, nec....	Part 3821	Mechanical measuring devices
3832	Optical instruments and lenses Made from purchased lenses..... [excludes electronic sighting and fire control equipment] From lenses made in the same plant..	Part 1941	Sighting and fire control equipment
3873	Watches, clocks, and watchcases.....	3831	Optical instruments and lenses
3915	Jewelers' materials & lapidary work.....	3871	Watches and clocks
		3872	Watchcases
		3912	Jewelers' findings and materials
3944	Games, toys, and children's vehicles....	3913	Lapidary work
3951	Pens and mechanical pencils Except felt tip markers.....	3941	Games and toys
	Felt tip markers.....	3943	Children's vehicles, except bicycles
3953	Marking devices..... [excludes felt tip markers]	3951	Pens and mechanical pencils
3995	Burial caskets..... [excludes other items such as clothing, embalming fluid, and various items of equipment which are classified with similar products]	Part 3953	Marking devices
		Part 3953	Marking devices
		Part 3994	Morticians' goods
E. TRANSPORTATION AND PUBLIC UTILITIES			
4119	Local passenger transportation, nec..... [excludes ski and other recreational lifts]	Part 4119	Local passenger transportation, nec
4131	Intercity highway transportation.....	4131	Intercity bus lines
		4132	Intercity transportation, nec
4222	Refrigerated warehousing.....	4222	Refrigerated warehousing, nec
		4223	Food lockers
4311	U.S. Postal Service.....	Part 9190	Federal Government

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry			
Code	Short title	Code	Short title		
E. TRANSPORTATION AND PUBLIC UTILITIES—Continued					
4722	Passenger transportation arrangement.....	4721	Arrangement of transportation		
4723	Freight transportation arrangement.....				
4789	Transportation services nec.....				
F. WHOLESALE TRADE					
5021	Furniture.....	5097	Furniture and home furnishings		
5023	Home furnishings.....				
5031	Lumber, plywood, and millwork Lumber, plywood, and millwork.....				
5039	Dealers selling primarily to contractors, but not to the public	Part 5098	Lumber and construction materials		
	Construction materials, nec	Part 5211	Lumber and other building materials ⁵		
	Misc. fabricated metal construction materials	Part 5091	Metals and minerals, exc. petroleum		
	Construction materials, nec.....	Part 5098	Lumber and construction materials		
5041	Dealers selling to contractors, but not usually to the public	Part 5211	Lumber and other building materials ⁵		
	Dealers selling to contractors, but not usually to the public	Part 5231	Paint, glass, and wallpaper stores ⁵		
	Sporting and recreational goods	Part 5088	Transportation equipment & supplies		
	Marine pleasure craft, equipment, and supplies	Part 5099	Wholesalers, nec		
5042	Sporting and recreational goods.....	Part 5099	Wholesalers, nec		
5043	Toys and hobby goods and supplies.....	Part 5091	Metals & minerals, except petroleum		
5048	Photographic equipment and supplies.....	5063	Electrical apparatus and equipment		
5051 ⁴	Metals service centers and offices.....	5241	Electrical supply stores ⁵		
5052	Coal and other minerals and ores.....	5074	Plumbing and heating equipment		
5063	Electrical apparatus and equipment.....	5077	Air conditioning and refrigeration		
		5221	Plumbing & heating equipment dealers ⁵		
		5083	Farm machinery and equipment		
5074	Plumbing & hydronic heating supplies.....	5252	Farm equipment dealers ⁵		
5075	Warm air heating & air conditioning.....	5087	Service establishment supplies		
5078	Refrigeration equipment and supplies.....	5089	Machinery and equipment, nec		
		Part 5088	Transportation equipment & supplies		
5083	Farm machinery and equipment.....				
5087	Service establishment equipment.....				
5088	Transportation equipment & supplies..... (excludes marine pleasure craft)				

See footnotes at end of table.

RELATION OF 1972 TO 1967 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
	F. WHOLESALE TRADE—Continued		
5094	Jewelry, watches & precious stones.....	Part 5099	Wholesalers, nec
5099	Durable goods, nec [excludes sporting and recreational goods; toys and hobby goods; photographic equipment; jewelry, watches, diamonds and other pre- cious stones]		
5111	Printing and writing paper.....	5096	Paper and its products
5112	Stationery supplies.....		
5113	Industrial & personal service paper.....		
5122 ¹	Drugs, proprietaries, and sundries.....	5022	Drugs, proprietaries, and sundries
5133 ¹	Piece goods.....	5033	Piece goods
5134 ¹	Notions and other dry goods.....	5034	Notions and other dry goods
5136 ¹	Men's clothing and furnishings.....	5036	Men's clothing and furnishings
5137 ¹	Women's and children's clothing.....	5037	Women's and children's clothing
5139 ¹	Footwear.....	5039	Footwear
5141 ¹	Groceries, general line.....	5041	Groceries, general line
5142 ¹	Frozen foods.....	5042	Frozen foods
5143 ¹	Dairy products.....	5043	Dairy products
5144 ¹	Poultry and poultry products.....	5044	Poultry and poultry products
5145 ¹	Confectionery.....	5045	Confectionery
5146 ¹	Fish and seafoods.....	5046	Fish and sea foods
5147 ¹	Meats and meat products.....	5047	Meats and meat products
5148 ¹	Fresh fruits and vegetables.....	5048	Fresh fruits and vegetables
5149 ¹	Groceries and related products, nec.....	5049	Groceries and related products, nec
5152 ¹	Cotton.....	5052	Cotton
5153 ¹	Grain.....	5053	Grain
5154	Livestock	Part 0729	Animal husbandry services, nec
	Livestock auctioning.....		
	Livestock wholesalers, except auction- ing	5054	Livestock
5159 ¹	Farm-product raw materials, nec.....	5059	Farm products raw materials, nec
5161 ¹	Chemicals and allied products.....	5029	Chemicals and allied products, nec
5171	Petroleum bulk stations & terminals.....	5092	Petroleum and petroleum products
5172	Petroleum products, nec.....		
5181	Beer and ale.....	5095	Beer, wine, and distilled beverages
5182	Wines and distilled beverages.....		
5191	Farm supplies	Part 5099	Wholesalers, nec
	Farm supplies.....		
	Hay, grain, and feed.....	5962	Hay, grain, and feed stores ³
	Farm supplies, nec.....	Part 5969	Farm and garden supply stores, nec ³
	[sales primarily to farmers]		
5194 ¹	Tobacco and tobacco products.....	5094	Tobacco and its products

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
F. WHOLESALE TRADE—Continued			
5198	Paints, varnishes, and supplies		
	Paints and varnishes.....	5028	Paints and varnishes
	Wallpaper.....	Part 5099	Wholesalers, nec
	Dealers selling primarily to contrac- tors, but not to the public	Part 5231	Paint, glass, and wallpaper stores *
5199	Nondurable goods, nec.....	Part 5099	Wholesalers, nec
G. RETAIL TRADE			
5211	Lumber and other building materials.... [excludes dealers selling primarily to contractors, but not to the public]	Part 5211	Lumber and other building mate- rials
5231	Paint, glass, and wallpaper stores..... [excludes dealers selling primarily to contractors, but not to the public]	Part 5231	Paint, glass, and wallpaper stores
5261	Retail nurseries and garden stores.....	Part 5969	Farm and garden supply stores, nec
5271	Mobile home dealers.....	Part 5592	Household trailer dealers
5399	Misc. general merchandise stores..... [excludes sewing, needlework, and piece goods shops; bedding and linen shops]	Part 5399	Misc. general merchandise stores
5422	Freezer and locker meat provisioners....	5421	Meat and fish (sea food) markets
5423	Meat and fish (seafood) markets.....		
5551	Boat dealers.....	5591	Boat dealers
5561	Recreation & utility trailer dealers....	Part 5592	Household trailer dealers
5571	Motorcycle dealers.....	5599	Automotive dealers, nec
5599	Automotive dealers, nec.....		
5611	Men's & boys' clothing & furnishings.. [excludes uniforms]	Part 5611	Men's & boys' clothing & fur- nishings
5621	Women's ready-to-wear stores..... [excludes uniforms]	Part 5621	Women's ready-to-wear stores
5699	Miscellaneous apparel & accessories		
	Uniforms men's.....	Part 5611	Men's & boys' clothing & fur- nishings
	Uniforms, women's.....	Part 5621	Women's ready-to-wear stores
	Custom tailors.....	5671	Custom tailors
	Miscellaneous apparel and accessories..	5699	Miscellaneous apparel & accessories
	Wig and toupee stores.....	Part 5999	Miscellaneous retail stores, nec

See footnotes at end of table.

RELATION OF 1972 TO 1967 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 Industry		1967 Industry	
Code	Short title	Code	Short title
G. RETAIL TRADE—Continued			
5719	Misc. home furnishings stores		
	Bedding and linen shops.....	Part 5399	Misc. general merchandise stores
	China, glassware, metalware.....	5715	China, glassware & metalware stores
	Misc. furnishings.....	5719	Miscellaneous home furnishings stores
5931	Used merchandise stores.....	5932	Antique stores
5941	Sporting goods and bicycle shops.....	5933	Secondhand stores
5944 ¹	Jewelry stores.....	5952	Sporting goods stores
5945 ¹	Hobby, toy, and game shops.....	5953	Bicycle shops
5946 ¹	Camera & photographic supply stores...	5971	Jewelry stores
		5995	Hobby, toy, and game shops
		5996	Camera & photographic supply stores
5947 ¹	Gift, novelty, and souvenir shops.....	5997	Gift, novelty, and souvenir shops
5948	Luggage and leather goods stores.....	Part 5999	Miscellaneous retail stores, nec
5949	Sewing, needlework, and piece goods...	Part 5399	Misc. general merchandise stores
5961 ¹	Mail order houses.....	5321	Mail order houses
5962 ¹	Merchandising machine operators.....	5341	Merchandising machine operators
5963 ¹	Direct selling organizations.....	5351	Direct selling organizations
5999	Miscellaneous retail stores, nec.....	Part 5999	Retail stores, nec
H. FINANCE, INSURANCE, AND REAL ESTATE			
6052	Foreign exchange establishments.....	6052	Foreign exchange establishments
6059	Functions related to banking, nec.....	Part 6053	Check cashing & currency exchanges
6153	Short-term business credit	Part 6053	Check cashing & currency exchanges
	Except credit card service, collection by central agency	6059	Functions related to banking, nec
	Credit card service, collection by central agency		
6159	Misc. business credit institutions	6153	Short-term business credit
	Miscellaneous business credit institutions, nec	Part 7321	Credit reporting and collection
	Finance leasing, other equipment.....	6159	Misc. business credit institutions
	Finance leasing, passenger cars.....	Part 7394	Equipment rental and leasing
	Finance leasing, trucks.....	Part 7512	Passenger car rental and leasing
6162	Mortgage bankers and correspondents	Part 7513	Truck rental and leasing
	Except loan correspondents.....	6152	Bond and mortgage companies
	Loan correspondents.....	Part 6161	Loan correspondents and brokers
6163	Loan brokers.....	Part 6161	Loan correspondents and brokers
	(excludes loan correspondents)		

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
H. FINANCE, INSURANCE, AND REAL ESTATE—Continued			
6311	Life insurance.....	6312	Stock life insurance companies
		6313	Mutual life insurance companies
		6319	Life insurance carriers, nec
6321	Accident and health insurance.....	6322	Stock accident and health insurance
		6323	Mutual accident and health insurance
6331	Fire, marine, and casualty insurance	6329	Accident and health insurance, nec
	Stock.....	6332	Stock fire, marine, and casualty
	Mutual.....	6333	Mutual fire, marine, and casualty
	Other.....	6339	Fire, marine, and casualty, nec
	Beller insurance.....	Part 6399	Insurance carriers, nec
6371	Pension, health, and welfare funds.....	Part 6399	Insurance carriers, nec
6399	Insurance carriers, nec		
	Bank deposit insurance.....	6352	Bank deposit insurance
	Other insurance.....	Part 6399	Insurance carriers, nec
6515	Mobile home site operators.....	Part 7031	Trailer parks
6519	Real property lessors, nec.....	6515	Agricultural property lessors
		6516	Mining and oil property lessors
		6518	Public utility property lessors
		6519	Real property lessors, nec
6794	Patent owners and lessors		
	Patent owners and lessors, nec.....	6794	Patent owners and lessors
	Music licensing to radio stations.....	Part 7949	Amusement and recreation, nec
I. SERVICES			
7011	Hotels, motels, and tourist courts		
	Except ski lodges and resorts.....	7011	Hotels, tourist courts, and motels
	Ski lodges and resorts.....	Part 7032	Sporting and recreational camps
7021	Rooming and boarding houses.....	Part 7021	Rooming and boarding houses
	[excludes homes for the aged, children, and retarded]		
7032	Sporting and recreational camps.....	Part 7032	Sporting and recreational camps
	[excludes ski lodges and resorts and day camps]		
7033	Trailer parks for transients.....	Part 7031	Trailer parks
	[excludes mobile home sites]		
7041	Membership-basis organization hotels.....	Part 7041	Membership-basis organization hotels
	[excludes homes for the aged]		
7212	Garment pressing & cleaners' agents.....	Part 7271	Garment pressing, alteration, repair

See footnotes at end of table.

RELATION OF 1972 TO 1967 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
	I. SERVICES—Continued		
7215	Coin-operated laundries and cleaning Stores.....	7215	Coin-operated laundries and clean- ing
	Routes.....	Part 7299	Miscellaneous personal services
7217	Carpet and upholstery cleaning Not on customers' premises.....	7217	Rug cleaning and repairing plants
	On customers' premises, including upholstery cleaning	Part 7299	Miscellaneous personal services
7219	Laundry and garment services, nec Laundries, except power.....	7212	Laundries, except power
	Garment alteration and repair.....	Part 7271	Garment pressing, alteration, repair
7221	Photographic studios, portrait.....	Part 7221	Photographic studios
7299	Miscellaneous personal services Miscellaneous personal services.....	Part 7299	Miscellaneous personal services
	(excludes rug and upholstery clean- ing on customers' premises and coin-operated laundry routes)		
	Tax preparation service.....	Part 8931	Accounting, auditing, and book- keeping
7321	Credit reporting and collection.....	Part 7321	Credit reporting and collection
	[excludes credit card service where collection is by a central agency]		
7333	Commercial photography and art Commercial photography.....	Part 7221	Photographic studios
	Silk screen designing.....	Part 7399	Business services, nec
	Production of still and slide film.....	7815	Production of still, slide films
	Commercial art.....	Part 8999	Services, nec
7362	Temporary help supply services.....	7398	Temporary help supply service
7369	Personnel supply services, nec.....	Part 7399	Business services, nec
7372	Computer programming and software.....	Part 7392	Business consulting services
7374	Data processing services Calculating service (computer).....	Part 7392	Business consulting services
	Data processing service.....	Part 8931	Accounting, auditing, & book- keeping
7379	Computer related services, nec Computer consulting services, other than programming	Part 7392	Business consulting services
	Computer leasing, except finance or by manufacturer	Part 7394	Equipment rental and leasing
	Computer maintenance and repair....	Part 7629	Electrical repair shops, nec

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
I. SERVICES—Continued			
7391	Research & development laboratories Commercial research and development Nonprofit commercial research and development	7391	Research & development laboratories
7392	Management and public relations..... [excludes computer, interior decorating, telephone solicitation, and calculating services]	Part 8921	Nonprofit research agencies
7393	Detective and protective services Except servicing of mechanical protective devices Servicing of mechanical protective (burglar and fire alarm) devices	Part 7392	Business consulting services
7394	Equipment rental and leasing..... [excludes finance leasing and computer leasing]	7393	Detective and protective services
7399	Business services, nec Interior decorating; telephone solicitation service Miscellaneous business services..... Music distribution systems, not coin-operated	Part 7399	Business services, nec
7512	Passenger car rental and leasing..... [excludes finance leasing]	Part 7394	Equipment rental and leasing
7513	Truck rental and leasing..... [excludes finance leasing]	Part 7392	Business consulting services
7549	Automobile services, nec..... [excludes auto driving instruction]	Part 7399	Business services, nec
7629	Electrical repair shops, nec..... [excludes computer maintenance and repair]	Part 7949	Amusement and recreation, nec
7819 ¹	Services allied to motion pictures.....	Part 7512	Passenger car rental and leasing
7823 ¹	Motion picture film exchanges.....	Part 7513	Truck rental and leasing
7824 ¹	Film or tape distribution for TV.....	Part 7549	Automobile services, nec
7829 ¹	Motion picture distribution services.....	Part 7629	Electrical repair shops, nec
7992 ¹	Public golf courses.....	7821	Motion picture production services
7993 ¹	Coin-operated amusement devices.....	7816	Motion picture film exchanges
7996 ¹	Amusement parks.....	7817	Film or tape distribution for TV
7997	Membership sports & recreation clubs Golf clubs and country clubs..... Other membership clubs.....	7818	Motion picture distribution services
		7942	Public golf courses
		7943	Coin-operated amusement devices
		7946	Amusement parks
		7947	Golf clubs and country clubs
		Part 7949	Amusement and recreation, nec

See footnotes at end of table.

RELATION OF 1972 TO 1967 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
	I. SERVICES—Continued		
7999	Amusement and recreation, nec		
	Ski lifts and other recreational lifts.....	Part 4119	Local passenger transportation, nec
	Day camps, recreational.....	Part 7032	Sporting and recreational camps
	Skating rinks.....	7945	Skating rinks
	Amusement and recreation services, nec	Part 7949	Amusement and recreation, nec
	[excludes music licensing to radio stations, membership sports and recreation clubs, and music distribution systems]		
	Commercial museums.....	Part 8411	Museums and art galleries
	Commercial animal and reptile exhibits	Part 8421	Botanical and zoological gardens
8042	Offices of optometrists.....		
8049	Offices of health practitioners, nec.....	Part 8099	Health and allied services, nec
8051	Skilled nursing care facilities.....	8092	Sanatoria, convalescent & rest homes
8059	Nursing and personal care, nec.....		
8062	General medical & surgical hospitals...	8061	Hospitals
8063	Psychiatric hospitals.....		
8069	Specialty hospitals, exc. psychiatric.....		
8081	Outpatient care facilities.....		
8091	Health and allied services, nec.....		
	[excludes health practitioners and rehabilitation centers and institutions]	Part 8099	Health and allied services, nec
8211	Elementary and secondary schools.....	8211	Elementary and secondary schools
	[excludes nursery schools]		
8243	Data processing schools.....		
8244	Business and secretarial schools.....		
8249	Vocational schools, nec.....	Part 8242	Vocational schools
	[excludes flying instruction]		
8299	Schools & educational services, nec		
	Auto driving instruction.....	Part 7549	Automobile services, nec
	Flying instruction.....	Part 8242	Vocational schools
	School services, nec.....	Part 8299	Schools & educational services, nec
	[excludes vocational rehabilitation counseling]		

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIO industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
	I. SERVICES—Continued		
8321	Individual and family services		
	Social services.....	Part 8671	Charitable organizations
	Marriage counseling.....	Part 8999	Services, nec
8331	Job training and related services		
	Rehabilitation centers.....	Part 8099	Health and allied services, nec
	Rehabilitation counseling.....	Part 8299	Schools & educational services, nec
	Other.....	Part 8671	Charitable organizations
8351	Child day care services		
	Nursery schools.....	Part 8211	Elementary and secondary schools
	Except nursery schools.....	Part 8671	Charitable organizations
8361	Residential care		
	Homes for children, aged, and retarded	Part 7021	Rooming and boarding houses
	Homes for the aged or retarded.....	Part 7041	Membership-basis organization hotels
	Homes for children, aged, and retarded	Part 8671	Charitable organizations
8399	Social services, nec		
	Social services.....	Part 8671	Charitable organizations
	Funding organizations.....	Part 8699	Nonprofit member organizations, nec
8411	Museums and art galleries.....	Part 8411	Museums and art galleries
	[excludes commercial-type]		
8421	Botanical and zoological gardens.....	Part 8421	Botanical and zoological gardens
	[excludes commercial-type]		
8611	Business associations.....	Part 8611	Business associations
	[excludes dairy herd improvement associations]		
8699	Membership organizations, nec.....	Part 8699	Nonprofit member organizations, nec
8922	Noncommercial research organizations..	Part 8921	Nonprofit research agencies
	[excludes commercial research & development]		
8931	Accounting, auditing & bookkeeping.....	Part 8931	Accounting, auditing, & bookkeeping services
	[excludes establishments primarily furnishing data processing services or tax preparation services]		
8999	Services, nec.....	Part 8999	Services, nec
	[excludes commercial artists and marriage counseling]		

See footnotes at end of table.

RELATION OF 1972 TO 1967 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1972 industry		1967 industry	
Code	Short title	Code	Short title
	J. PUBLIC ADMINISTRATION *		
9111	Executive offices.....		
9121	Legislative bodies.....		
9181	Executive and legislative combined.....		
9199	General government, nec.....		
9211	Courts.....		
9221	Police protection.....		
9222	Legal counsel and prosecution.....		
9223	Correctional institutions.....		
9224	Fire protection.....		
9229	Public order and safety, nec.....		
9311	Finance, taxation & monetary policy....		
9411	Admin. of educational programs.....	* Part 9190	Federal Government
9431	Admin. of public health programs.....	* 9290	State government
9441	Admin. of social & manpower programs....	* 9390	Local government
9451	Admin. of veterans' affairs.....	* 9490	International government
9511	Air, water & solid waste management....		
9512	Land, mineral, wildlife conservation....		
9531	Housing programs.....		
9532	Urban and community development....		
9611	Admin. of general economic programs....		
9621	Regulation, admin. of transportation....		
9631	Regulation, admin. of utilities.....		
9641	Regulation of agricultural marketing....		
9651	Regulation misc. commercial sectors....		
9661	Space research and technology.....		
9711	National security.....		
9721	International affairs.....		

* No change in content.

* The classification of separate establishments milling or otherwise preparing nonmetallic minerals in this Division and in Industry 3295 has been clarified. Industry 3295 will include only establishments crushing or grinding or otherwise preparing minerals mined in Industry Groups 145 and 149, and Industry 1472. Establishments crushing or grinding minerals mined in Industry Groups 142 and 144 and Industries 1473 to 1479 are included in these same industries.

* The Special Trade Contractors in Major Group 17 were changed to include special trade contractors engaged in work on heavy or engineering construction as well as building construction.

* This industry is limited to the primary and semifinished metals forms, with finished products such as axles, wheels, and air ducts transferred to more specific industries.

* Retail.

* Although not individually noted, government-owned business-type establishments that were coded using major group codes for the 3d and 4th digits, are now classified to the full 4-digit industry, instead of in the Government Division.

Appendix C—Section II

Relation of 1967 to 1972 SIC Industries Showing Only Changes To 1972

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)

1967 industry		1972 industry	
Code	Short title	Code	Short title
	A. AGRICULTURE, FORESTRY, AND FISHERIES		
0112	Cotton.....	¹ 0131	Cotton
0113	Cash grains		
	Wheat.....	0111	Wheat
	Rice.....	0112	Rice
	Corn.....	0115	Corn
	Soybeans.....	0116	Soybeans
	Cash grains, nec.....	Part 0119	Cash grains, nec
0114	Tobacco.....	¹ 0132	Tobacco
0119	Field crops, nec		
	Flax and mustard seed.....	Part 0119	Cash grains, nec
	Sugar crops.....	0133	Sugar crops
	Irish potatoes.....	0134	Irish potatoes
	Field crops, nec.....	0139	Field crops, except cash grains, nec
		0171	Berry crops
		0172	Grapes
		0173	Tree nuts
0122	Fruits and tree nuts.....	0174	Citrus fruits
		0175	Deciduous tree fruits
		0179	Fruits and tree nuts, nec
0123	Vegetables.....	¹ 0161	Vegetables and melons
0132	Dairies.....	¹ 0241	Dairy farms
0133	Broiler chickens.....	Part 0251	Broiler, fryer, and roaster chickens
0134	Poultry, except broiler chickens		
	Fryer and roaster chickens.....	Part 0251	Broiler, fryer, and roaster chickens
	Chicken eggs.....	0252	Chicken eggs
	Turkeys and turkey eggs.....	0253	Turkeys and turkey eggs
	Poultry, nec.....	Part 0259	Poultry and eggs, nec
0135	Beef cattle		
	Feedlots, own account.....	Part 0211	Beef cattle feedlots
	Except feedlots.....	0212	Beef cattle, except feedlots
0136	Hogs.....	Part 0213	Hogs
0139	Livestock, nec.....	Part 0214	Sheep and goats

See footnotes at end of table.

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RELATION OF 1967 TO 1972 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
	A. AGRICULTURE, FORESTRY, AND FISHERIES—Continued		
0141	General farms		
	General farms, primarily crop.....	0191	General farms, primarily crop
	General livestock, nec.....	0219	General livestock, nec
	General poultry farms.....	Part 0259	Poultry and eggs, nec
	General farms, primarily livestock....	0291	General farms, primarily livestock
		0181	Ornamental nursery products
0192	Horticultural specialties.....	0182	Food crops grown under cover
		0189	Horticultural specialties, nec
0193	Animal specialties		
	Fur-bearing animals and rabbits.....	0271	Fur-bearing animals and rabbits
	Horses and other equines.....	0272	Horses and other equines
	Animal specialties, nec.....	Part 0279	Animal specialties, nec
0199	Agricultural production, nec.....	Part 0279	Animal specialties, nec
0712	Cotton ginning and compressing.....	0724	Cotton ginning
0713	Grist mills.....	Part 0723	Crop preparation services for mar- ket
0714	Corn shelling, hay baling, threshing		
	Corn and hay harvesting, combining..	Part 0722	Crop harvesting
	Corn shelling and hay baling.....	Part 0723	Crop preparation services for mar- ket
0715	Packing of fruits and vegetables.....	Part 0723	Crop preparation services for mar- ket
0719	Agricultural services, nec		
	Soil preparation services.....	0711	Soil preparation services
	Crop planting and protection.....	0721	Crop planting and protection
	Crop harvesting, exc. corn and hay....	Part 0722	Crop harvesting
	Crop preparation, nec.....	Part 0723	Crop preparation services for mar- ket
	General crop services.....	0729	General crop services
	Farm labor contractors.....	0761	Farm labor contractors
	Farm management services.....	0762	Farm management services
0722	Veterinarians and animal hospitals		
	Veterinary services, farm livestock....	0741	Veterinary services, farm livestock
	Veterinary services, specialties.....	0742	Veterinary services, specialties
	Boarding kennels.....	Part 0752	Animal specialty services
0723	Poultry hatcheries.....	0254	Poultry hatcheries
0729	Animal husbandry services, nec		
	Beef cattle feedlots, contract.....	Part 0211	Beef cattle feedlots
	Hog feeding, contract.....	Part 0213	Hogs
	Sheep and goat feeding, contract.....	Part 0214	Sheep and goats
	Worms.....	Part 0279	Animal specialties, nec
	Livestock services, nec.....	Part 0751	Livestock services, exc. specialties
	Animal services, nec.....	Part 0752	Animal specialty services
	Livestock auctioning.....	Part 5154	Livestock

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
A. AGRICULTURE, FORESTRY, AND FISHERIES—Continued			
0731	Horticultural services.....	0781	Landscape counseling and planning
		0782	Lawn and garden services
		0783	Ornamental shrub and tree services
0741	Hunting, trapping, game propagation....	0971	Hunting, trapping, game propagation
0822	Forest nurseries.....	0821	Forest nurseries and seed gathering
0823	Tree seed gathering and extracting.....		
0842	Gathering barks & gums, except pine.....	0849	Gathering of forest products, nec
0861	Gathering of forest products, nec.....		
0914	Whale products.....	0919	Miscellaneous marine products
0919	Miscellaneous marine products.....		
0989	Fish hatcheries, farms & preserves		
	Fish and frog farms.....	Part 0279	Animal specialties, nec
	Fish hatcheries and preserves.....	0921	Fish hatcheries and preserves
B. MINING¹			
1042	Lode gold.....	1041	Gold ores
1043	Placer gold.....		
1062	Manganese ores.....	1061	Ferroalloy ores, except vanadium
1064	Tungsten ores.....		
1069	Ferroalloy ores, nec.....	1099	Metal ores, nec
1093	Titanium ores.....		
1099	Metal ores, nec.....	1211	Bituminous coal and lignite
1211	Bituminous coal.....		
1212	Lignite.....	1311	Crude petroleum and natural gas
1311	Crude petroleum and natural gas	Part 2819	Industrial inorganic chemicals, nec
	Except sulfur extracted from sour gas..		
	Sulfur extracted from sour gas.....	1459	Clay and related minerals, nec
1456	Feldspar.....		
1459	Clay and related minerals, nec.....		
1493	Mica.....		
1494	Native asphalt and bitumens.....	1499	Nonmetallic minerals, nec
1495	Pumice and pumicite.....		
1497	Natural abrasives, except sand.....		
1498	Peat.....		
1499	Nonmetallic minerals, nec.....		

See footnotes at end of table.

RELATION OF 1967 TO 1972 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
C. CONTRACT CONSTRUCTION¹			
1511	General building contractors		
	Single-family housing.....	1521	Single-family housing construction
	Residential housing, nec.....	1522	Residential construction, nec
	Industrial buildings and warehouses....	1541	Industrial buildings and ware- houses
	Nonresidential construction, nec.....	1542	Nonresidential construction, nec
	Pumping stations.....	Part 1623	Water, sewer, and utility lines
	Heavy industrial facilities.....	Part 1629	Heavy construction, nec
1611	Highway and street construction		
	Highway and street construction.....	1611	Highway and street construction
	Sewer and waterworks contractors.....	Part 1623	Water, sewer, and utility lines
	Swimming pool and fence contractors....	Part 1799	Special trade contractors, nec
1621	Heavy construction, nec		
	Bridge, tunnel, and elevated highway..	1622	Bridge, tunnel, & elevated highway
	Pipeline, communication, and power- line contractors	Part 1623	Water, sewer, and utility lines
	Other heavy construction.....	Part 1629	Heavy construction, nec
1742	Plastering and lathing.....	Part 1742	Plastering, drywall and insulation
1792	Ornamental metal work.....	Part 1799	Special trade contractors, nec
1796	Installing building equipment, nec.....	Part 1796	Installing building equipment, nec
1799	Special trade contractors, nec		
	Acoustical, insulation, drywall.....	Part 1742	Plastering, drywall and insulation
	Installing machinery and equipment....	Part 1796	Installing building equipment, nec
	Other special trade contractors.....	Part 1799	Special trade contractors, nec
D. MANUFACTURING			
1911	Guns, howitzers, and mortars.....	Part 3489	Ordnance and accessories, nec
1925	Complete guided missiles.....	¹ 3761	Guided missiles and space vehicles
1929	Ammunition, exc. for small arms, nec....	¹ 3483	Ammunition, exc. for small arms, nec
1931	Tanks and tank components.....	¹ 3795	Tanks and tank components
1941	Sighting and fire control equipment		
	Sighting and fire control equipment, electronic	Part 3662	Radio and TV communication equipment
	Optical instruments and lenses.....	Part 3832	Optical instruments and lenses
1951	Small arms.....	¹ 3484	Small arms
1961	Small arms ammunition.....	¹ 3482	Small arms ammunition
1999	Ordnance and accessories, nec.....	Part 3489	Ordnance and accessories, nec

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
	D. MANUFACTURING—Continued		
2011	Meat packing plants	2011	Meat packing plants
	Meat packing plants, nec.....	Part 2032	Canned specialties
	Baby food meats.....	Part 2047	Dog, cat, and other pet food
	Pet food, from nonfood animals slaughtered in same plant		
2013	Sausages and other prepared meats	2013	Sausages and other prepared meats
	Sausages & other prepared meats, nec.....	Part 2032	Canned specialties
	Baby food meats.....		
2015	Poultry dressing plants.....	2016	Poultry dressing plants
2031	Canned and cured sea foods.....	2017	Poultry and egg processing
2032	Canned specialties.....	2091	Canned and cured seafoods
2036	Fresh or frozen packaged fish.....	Part 2032	Canned specialties
2037	Frozen fruits and vegetables.....	2092	Fresh or frozen packaged fish
		2037	Frozen fruits and vegetables
		2038	Frozen specialties
2042	Prepared feeds for animals and fowls		
	Dog, cat, and other pet food.....	Part 2047	Dog, cat, and other pet food
	Other prepared feeds.....	2048	Prepared feeds, nec
2071	Confectionery products.....	2065	Confectionery products
2072	Chocolate and cocoa products.....	2066	Chocolate and cocoa products
2073	Chewing gum.....	2067	Chewing gum
2091	Cottonseed oil mills.....	2074	Cottonseed oil mills
2092	Soybean oil mills.....	2075	Soybean oil mills
2093	Vegetable oil mills, nec.....	2076	Vegetable oil mills, nec
2094	Animal and marine fats and oils.....	2077	Animal and marine fats and oils
2096	Shortening and cooking oils.....	2079	Shortening and cooking oils
2256	Knit fabric mills.....	2257	Circular knit fabric mills
		2258	Warp knit fabric mills
2297	Scouring and combing plants.....	Part 2299	Textile goods, nec
2299	Textile goods, nec		
	Nonwoven fabrics.....	2297	Nonwoven fabrics
	Other textile goods, nec.....	Part 2299	Textile goods, nec
2426	Hardwood dimension and flooring.....	Part 2426	Hardwood dimension and flooring
2431	Millwork		
	Millwork, nec.....	2431	Millwork
	Wood kitchen cabinets to be built-in...	Part 2434	Wood kitchen cabinets
2432	Veneer and plywood.....	2435	Hardwood veneer and plywood
		2436	Softwood veneer and plywood
2433	Prefabricated wood structures.....	2439	Structural wood members, nec
		2452	Prefabricated wood buildings
2442	Wirebound boxes and crates.....		
2443	Veneer and plywood containers.....	2449	Wood containers, nec
2445	Cooperage.....		

See footnotes at end of table.

RELATION OF 1967 TO 1972 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
	D. MANUFACTURING—Continued		
2499	Wood products, nec.....	2448	Wood pallets and skids
		2492	Particleboard
2511	Wood household furniture	2499	Wood products, nec
	Wood kitchen cabinets, exc. to be built-in	Part 2434	Wood kitchen cabinets
	Wood household furniture, nec.....	2511	Wood household furniture
	Wood TV, radio, phonograph, and sewing machine cabinets	2517	Wood TV and radio cabinets
2512	Upholstered household furniture		
	Wood furniture frames.....	Part 2426	Hardwood dimension and flooring
	Upholstered household furniture, nec.....	2512	Upholstered household furniture
2644	Wallpaper.....	Part 2649	Converted paper products, nec
2649	Converted paper products, nec		
	Stationery products.....	2648	Stationery products
	Other.....	Part 2649	Converted paper products, nec
2751	Commercial printing, exc. lithographic		
	Letterpress and screen.....	2751	Commercial printing, letterpress
	Gravure.....	2754	Commercial printing, gravure
2752	Commercial printing, lithographic.....	2752	Commercial printing, lithographic
		2795	Lithographic platemaking services
2815	Cyclic intermediates and crudes.....	2865	Cyclic crudes and intermediates
2818	Industrial organic chemicals, nec		
	Industrial organic chemicals, nec.....	2869	Industrial organic chemicals, nec
	Urea.....	Part 2873	Nitrogenous fertilizers
2819	Industrial inorganic chemicals, nec		
	Industrial inorganic chemicals.....	Part 2819	Industrial inorganic chemicals, nec
	Household bleaches.....	Part 2842	Polishes and sanitation goods
	Nitrogenous fertilizer materials; nitric acid	Part 2873	Nitrogenous fertilizers
	Phosphoric acid and diammonium phosphate	Part 2874	Phosphatic fertilizers
2821	Plastics materials and resins		
	Plastics materials and resins, nec.....	2821	Plastics materials and resins
	Adhesives from resins produced in same establishment	Part 2891	Adhesives and sealants
	Rods, sheets, etc. from resins produced in same establishment	Part 3079	Miscellaneous plastics products
2842	Polishes and sanitation goods		
	Polishes and sanitation goods, nec.....	Part 2842	Polishes and sanitation goods
	Household pesticidal preparations.....	Part 2879	Agricultural chemicals, nec
2851	Paints and allied products		
	Paints and allied products, nec.....	2851	Paints and allied products
	Calking compounds.....	Part 2891	Adhesives and sealants

See footnotes at end of table.

STANDARD INDUSTRIAL CLASSIFICATION

1967 Industry		1972 Industry	
Code	Short title	Code	Short title
	D. MANUFACTURING—Continued		
2871	Fertilizers		
	Natural organic fertilizers, except compost	Part 2873	Nitrogenous fertilizers
	Phosphatic fertilizers.....	Part 2874	Phosphatic fertilizers
2872	Fertilizers, mixing only.....	2875	Fertilizers, mixing only
2879	Agricultural chemicals, nec.....	Part 2879	Agricultural chemicals, nec
2891	Adhesives and gelatin		
	Adhesives.....	Part 2891	Adhesives and sealants
	Gelatin and sizes.....	Part 2899	Chemical preparations, nec
2899	Chemical preparations, nec		
	Sealants, nec.....	Part 2891	Adhesives and sealants
	Chemical preparations, nec.....	Part 2899	Chemical preparations, nec
2911	Petroleum refining		
	Except re-refining of oils, etc.....	2911	Petroleum refining
	Re-refining of oils and greases.....	Part 2992	Lubricating oils and greases
2952	Asphalt felts and coatings		
	Linoleum and tile cement.....	Part 2891	Adhesives and sealants
	Asphalt felts and coatings, nec.....	2952	Asphalt felts and coatings
2992	Lubricating oils and greases.....	Part 2992	Lubricating oils and greases
3021	Rubber footwear.....	Part 3021	Rubber and plastics footwear
3069	Fabricated rubber products, nec		
	Rubber cement.....	Part 2891	Adhesives and sealants
	Rubber hose and belting.....	Part 3041	Rubber and plastics hose and belting
	Fabricated rubber products, nec.....	3069	Fabricated rubber products, nec
	Rubber packing.....	Part 3293	Gaskets, packing & sealing devices
3079	Miscellaneous plastics products		
	Plastics footwear.....	Part 3021	Rubber and plastics footwear
	Plastics hose and belting.....	Part 3041	Rubber and plastics hose and belting
	Miscellaneous plastics products, nec.....	Part 3079	Miscellaneous plastics products
3121	Industrial leather belting		
	Leather belting.....	Part 3199	Leather goods, nec
	Leather packing.....	Part 3293	Gaskets, packing & sealing devices
3141	Shoes, except rubber.....	3143	Men's footwear, except athletic
		3144	Women's footwear, except athletic
		3149	Footwear, except rubber, nec
3199	Leather goods, nec.....	Part 3199	Leather goods, nec
3292	Asbestos products.....	Part 3292	Asbestos products
3293	Gaskets and insulations		
	Asbestos insulation.....	Part 3292	Asbestos products
	Gaskets and packing, nec.....	Part 3293	Gaskets, packing & sealing devices
3295	Minerals, ground or treated.....	3295	Minerals, ground or treated
3323	Steel foundries.....	3324	Steel investment foundries
		3325	Steel foundries, nec

See footnotes at end of table.

RELATION OF 1967 TO 1972 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
	D. MANUFACTURING—Continued		
3352	Aluminum rolling and drawing.....	3353	Aluminum sheet, plate, and foil
		3354	Aluminum extruded products
3391	Iron and steel forgings.....	3355	Aluminum rolling and drawing, nec
3392	Nonferrous forgings.....	3462	Iron and steel forgings
		3463	Nonferrous forgings
3399	Primary metal products, nec.....	3398	Metal heat treating
		3399	Primary metal products, nec
3433	Heating equipment, except electric Heating equipment, exc. electric, nec. Warm air heating equipment.....	3433	Heating equipment, except electric
		Part 3585	Refrigeration and heating equip- ment
3449	Miscellaneous metal work.....	3448	Prefabricated metal buildings
		3449	Miscellaneous metal work
3461	Metal stampings.....	3465	Automotive stampings
		3466	Crowns and closures
		3469	Metal stampings, nec
3481	Misc. fabricated wire products.....	3495	Wire springs
3491	Metal barrels, drums, and pails.....	3496	Misc. fabricated wire products
3492	Safes and vaults.....	3412	Metal barrels, drums, and pails
3496	Collapsible tubes.....		
3499	Fabricated metal products, nec.....	3499	Fabricated metal products, nec
3522	Farm machinery		
	Farm machinery, nec.....	Part 3523	Farm machinery and equipment
	Lawn and garden equipment.....	3524	Lawn and garden equipment
3531	Construction machinery.....	Part 3531	Construction machinery
3533	Oil field machinery		
	Well point systems.....	Part 3531	Construction machinery
	Oil field machinery.....	3533	Oil field machinery
3536	Hoists, cranes, and monorails.....	Part 3536	Hoists, cranes, and monorails
3537	Industrial trucks and tractors		
	Automatic stacking machines.....	Part 3536	Hoists, cranes, and monorails
	Industrial trucks and tractors.....	3537	Industrial trucks and tractors
3541	Machine tools, metal cutting types.....	Part 3541	Machine tools, metal cutting types
3548	Metalworking machinery, nec		
	Automotive maintenance equipment, metal cutting types	Part 3541	Machine tools, metal cutting types
	Power driven hand tools.....	3546	Power driven hand tools
	Rolling mill machinery.....	3547	Rolling mill machinery
	Metalworking machinery, nec.....	3549	Metalworking machinery, nec
3561	Pumps and compressors.....	3561	Pumps and pumping equipment
		3563	Air and gas compressors
3562	Ball and roller bearings.....	Part 3562	Ball and roller bearings

See footnotes at end of table.

STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 Industry		1972 Industry	
Code	Short title	Code	Short title
	D. MANUFACTURING—Continued		
3566	Power transmission equipment		
	Mounted ball and roller bearings.....	Part 3562	Ball and roller bearings
	Speed changers, drives and gears.....	3566	Speed changers, drives, and gears
	Power transmission equipment, nec....	3568	Power transmission equipment, nec
3574	Calculating and accounting machines		
	Other calculating machines.....	3574	Calculating and accounting machines
	Voting machines and ticket counting machines	Part 3579	Office machines, nec
3579	Office machines, nec.....	Part 3579	Office machines, nec
3582	Commercial laundry equipment		
	Commercial laundry equipment, nec....	3582	Commercial laundry equipment
	Coin-operated washers & dryers.....	Part 3633	Household laundry equipment
3585	Refrigeration machinery.....	Part 3585	Refrigeration and heating equipment
3599	Misc. machinery, except electrical		
	Metal packing.....	Part 3293	Gaskets, packing and sealing devices
	Carburetors, pistons, rings, valves....	3592	Carburetors, pistons, rings, valves
	Machinery, exc. electrical, nec.....	3599	Machinery, exc. electrical, nec
3611	Electric measuring instruments		
	Instrument transformers.....	Part 3612	Transformers
	Instruments to measure electricity....	3625	Instruments to measure electricity
3612	Transformers.....	Part 3612	Transformers
3633	Household laundry equipment.....	Part 3633	Household laundry equipment
		3645	Residential lighting fixtures
3642	Lighting fixtures.....	3646	Commercial lighting fixtures
		3647	Vehicular lighting equipment
		3648	Lighting equipment, nec
3662	Radio and TV communication equipment.	Part 3662	Radio and TV communication equipment
		3675	Electronic capacitors
		3676	Electronic resistors
3679	Electronic components, nec.....	3677	Electronic coils and transformers
		3678	Electronic connectors
		3679	Electronic components, nec
3711	Motor vehicles.....		
3712	Passenger car bodies.....	3711	Motor vehicles and car bodies
3713	Truck and bus bodies		
	Truck and bus bodies, nec.....	3713	Truck and bus bodies
	Demountable cargo containers.....	Part 3715	Truck trailers
3715	Truck trailers.....	Part 3715	Truck trailers
3722	Aircraft engines and engine parts.....	3724	Aircraft engines and engine parts
		3764	Space propulsion units and parts
3723	Aircraft propellers and parts.....	Part 3728	Aircraft equipment, nec

See footnotes at end of table.

RELATION OF 1967 TO 1972 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
	D. MANUFACTURING—Continued		
3729	Aircraft equipment, nec Aircraft equipment..... Space vehicle equipment.....	Part 3728 3769	Aircraft equipment, nec Space vehicle equipment, nec
3741	Locomotives and parts.....	3743	Railroad equipment
3742	Railroad and street cars.....		
3751	Motorcycles, bicycles, and parts Motorcycles, bicycles, and parts, nec.. Golf carts, etc.....	3751 Part 3799	Motorcycles, bicycles, and parts Transportation equipment, nec
3791	Trailer coaches Travel trailers and campers, nec..... Mobile homes.....	Part 3792 2451	Travel trailers and campers Mobile homes
3799	Transportation equipment, nec Farm trailers and wagons..... Folding tent-type trailers..... Transportation equipment, nec.....	Part 3523 Part 3792 Part 3799	Farm machinery and equipment Travel trailers and campers Transportation equipment, nec
3821	Mechanical measuring devices.....	3823 3824 3829	Process control instruments Fluid meters & counting devices Measuring & controlling devices, nec
3831	Optical instruments and lenses.....	Part 3832	Optical instruments and lenses
3871	Watches and clocks.....	3873	Watches, clocks, and watchcases
3872	Watchcases.....		
3912	Jewelers' findings and materials.....		
3913	Lapidary work.....	3915	Jewelers' materials & lapidary work
3941	Games and toys.....	3944	Games, toys & children's vehicles
3943	Children's vehicles, except bicycles.....		
3951	Pens and mechanical pencils.....		
3953	Marking devices Felt tip markers..... Marking devices.....	Part 3951 Part 3951 3953	Pens and mechanical pencils Pens and mechanical pencils Marking devices
3994	Morticians' goods Burial caskets..... Other morticians' goods.....	3995 Various	Burial caskets (Include in "nec" industry of various groups)
	E. TRANSPORTATION AND PUBLIC UTILITIES		
4021	Railroad passenger car service.....	Part 4789	Transportation services, nec
4119	Local passenger transportation, nec Except ski lifts..... Ski lifts.....	4119 Part 7999	Local passenger transportation, nec Amusement & recreation, nec
4131	Intercity bus lines.....	4131	Intercity highway transportation
4132	Intercity transportation, nec.....		
4222	Refrigerated warehousing, nec.....		
4223	Food lockers.....	4222	Refrigerated warehousing

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
E. TRANSPORTATION AND PUBLIC UTILITIES—Continued			
4721	Arrangement of transportation.....	4722	Passenger transportation arrangement
4731	Stockyards.....	4723	Freight transportation arrangement
4739	Transportation services, nec.....	Part 4739	Transportation services, nec
F. WHOLESALE AND RETAIL TRADE			
5022	Drugs, proprietaries, and sundries.....	5122	Drugs, proprietaries, and sundries
5028	Paints and varnishes.....	Part 5122	Paints, varnishes, and supplies
5029	Chemicals and allied products, nec.....	5161	Chemicals and allied products
5033	Piece goods.....	5133	Piece goods
5034	Notions and other dry goods.....	5134	Notions and other dry goods
5036	Men's clothing and furnishings.....	5136	Men's clothing and furnishings
5037	Women's and children's clothing.....	5137	Women's and children's clothing
5039	Footwear.....	5139	Footwear
5041	Groceries, general line.....	5141	Groceries, general line
5042	Frozen foods.....	5142	Frozen foods
5043	Dairy products.....	5143	Dairy products
5044	Poultry and poultry products.....	5144	Poultry and poultry products
5045	Confectionery.....	5145	Confectionery
5046	Fish and sea foods.....	5146	Fish and seafoods
5047	Meats and meat products.....	5147	Meat and meat products
5048	Fresh fruits and vegetables.....	5148	Fresh fruits and vegetables
5049	Groceries and related products, nec.....	5149	Groceries and related products, nec
5052	Cotton.....	5152	Cotton
5053	Grain.....	5153	Grain
5054	Livestock.....	Part 5154	Livestock
5059	Farm product raw materials, nec.....	5159	Farm-product raw materials, nec
5063	Electrical apparatus and equipment.....	Part 5063	Electrical apparatus and equipment
5074	Plumbing and heating equipment.....	Part 5074	Plumbing & hydronic heating supplies
5077	Air conditioning and refrigeration.....	Part 5075	Warm air heating & air conditioning
5083	Farm machinery and equipment.....	Part 5075	Warm air heating & air conditioning
5087	Service establishment supplies.....	Part 5078	Refrigeration equipment and supplies
5088	Transportation equipment & supplies	Part 5083	Farm machinery and equipment
	Marine pleasure craft, equipment and supplies	Part 5087	Service establishment equipment
	Transportation equipment and supplies	Part 5041	Sporting and recreational goods
		5088	Transportation equipment & supplies

See footnotes at end of table.

RELATION OF 1967 TO 1972 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
	F. WHOLESALE AND RETAIL TRADE—Continued		
5089	Machinery and equipment, nec.....	Part 5087	Service establishment equipment
5091	Metals & minerals, except petroleum Fabricated metal construction prod- ucts	Part 5039	Construction materials, nec
	Primary & semifinished metal forms...	4 5051	Metal service centers and offices
	Coal and minerals and ores.....	5052	Coal and other minerals and ores
5092	Petroleum and petroleum products.....	5171	Petroleum bulk stations & terminals
5094	Tobacco and its products.....	5172	Petroleum products, nec
5095	Beer, wine, and distilled beverages.....	1 5194	Tobacco and tobacco products
		5181	Beer and ale
		5182	Wines and distilled beverages
5096	Paper and its products.....	5111	Printing and writing paper
		5112	Stationery and supplies
5097	Furniture and home furnishings.....	5113	Industrial & personal service paper
		5021	Furniture
5098	Lumber and construction materials	5023	Home furnishings
	Lumber, plywood, millwork.....	Part 5031	Lumber, plywood, and millwork
	Construction materials, nec.....	Part 5039	Construction materials, nec
5099	Wholesalers, nec		
	Sporting and recreational goods, nec..	Part 5041	Sporting and recreational goods
	Toys and hobby goods & supplies...	5042	Toys and hobby goods and supplies
	Photographic equipment & supplies...	5043	Photographic equipment & supplies
	Jewelry, watches & precious stones...	5094	Jewelry, watches & precious stones
	Durable goods, nec.....	5099	Durable goods, nec
	Farm supplies.....	Part 5191	Farm supplies
	Wallpaper.....	Part 5198	Paints and varnishes
	Nondurable goods, nec.....	5199	Nondurable goods, nec
5211	Lumber and other building materials		
	Primarily selling to contractors, but not to the public	Part 5031	Lumber, plywood, and millwork ⁵
	Lumber, plywood and millwork.....	Part 5039	Construction materials, nec ⁵
	Construction materials, nec.....	5211	Lumber & other building materials
	Primarily selling to contractors, but also to the public	Part 5074	Plumbing & hydronic heating sup- plies ⁵
5221	Plumbing & heating equipment dealers..	Part 5075	Warm air heating & air condition- ing ⁵
		Part 5078	Refrigeration equipment and sup- plies ⁵

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
	F. WHOLESALE AND RETAIL TRADE—Continued		
5231	Paint, glass, and wallpaper stores Primarily selling to contractors, but not to the public Glass..... Paints and varnishes..... Selling to contractors, but also to the public	Part 5039	Construction materials, nec ¹
		Part 5198	Paints and varnishes ¹
		5231	Paint, glass, and wallpaper stores
5241	Electrical supply stores.....	Part 5063	Electrical apparatus and equipment ¹
5252	Farm equipment dealers.....	Part 5083	Farm machinery and equipment ¹
5321	Mail order houses.....	¹ 5961	Mail order houses
5341	Merchandising machine operators.....	¹ 5962	Merchandising machine operators
5351	Direct selling organizations.....	¹ 5963	Direct selling organizations
5399	Misc. general merchandise stores Misc. general merchandise stores..... Bedding and linen shops..... Sewing and piece goods stores.....	5399	Misc. general merchandise stores
		Part 5719	Misc. home furnishings stores
		5949	Sewing, needlework, and piece goods
5421	Meat and fish (sea food) markets.....	5422	Freezer & locker meat provisioners
5591	Boat dealers.....	5423	Meat and fish (seafood) markets
5592	Household trailer dealers.....	¹ 5551	Boat dealers
		5271	Mobile home dealers
5599	Automotive dealers, nec.....	5561	Recreation & utility trailer dealers
5611	Men's & boys' clothing & furnishings Men's & boys' clothing & furnishings..... Uniforms.....	5571	Motorcycle dealers
		5599	Automotive dealers, nec
		5611	Men's & boys' clothing & furnish- ings
5621	Women's ready-to-wear stores Women's ready-to-wear stores..... Uniforms.....	Part 5699	Miscellaneous apparel & accessor- ies
		5621	Women's ready-to-wear stores
		Part 5699	Miscellaneous apparel & accessor- ies
5671	Custom tailors.....	Part 5699	Miscellaneous apparel & accessor- ies
5699	Miscellaneous apparel & accessories.....	Part 5719	Misc. home furnishings stores
5715	China, glassware & metalware stores.....	5931	Used merchandise stores
5719	Miscellaneous home furnishings stores.....	5941	Sporting goods and bicycle shops
5932	Antique stores.....	Part 5191	Farm supplies ¹
5933	Secondhand stores.....		
5952	Sporting goods stores.....		
5953	Bicycle shops.....		
5962	Hay, grain, and feed stores.....		

See footnotes at end of table.

RELATION OF 1967 TO 1972 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
	F. WHOLESALE AND RETAIL TRADE—Continued		
5969	Farm and garden supply stores, nec Farm supplies sales primarily to farm- ers Garden supply stores, nec.....	Part 5191	Farm supplies ²
5971	Jewelry stores.....	5261	Retail nurseries and garden stores
5995	Hobby, toy, and game shops.....	¹ 5944	Jewelry stores
5996	Camera & photographic supply stores...	¹ 5945	Hobby, toy, and game shops
		¹ 5946	Camera & photographic supply stores
5997	Gift, novelty, and souvenir shops.....	¹ 5947	Gift, novelty, and souvenir shops
5999	Miscellaneous retail stores, nec Wig and toupee stores.....	Part 5699	Miscellaneous apparel & accessor- ies
	Luggage and leather goods stores.....	5948	Luggage and leather goods stores
	Miscellaneous retail stores, nec.....	5999	Miscellaneous retail stores, nec
	G. FINANCE, INSURANCE, AND REAL ESTATE		
6052	Foreign exchange establishments.....	Part 6052	Foreign exchange establishments
6053	Check cashing & currency exchanges Currency exchanges.....	Part 6052	Foreign exchange establishments
	Check cashing.....	Part 6059	Functions related to banking, nec
6059	Functions related to banking, nec.....	Part 6059	Functions related to banking, nec
6152	Bond and mortgage companies.....	Part 6162	Mortgage bankers and correspond- ents
6153	Short-term business credit.....	Part 6153	Short-term business credit
6159	Misc. business credit institutions.....	Part 6159	Misc. business credit institutions
6161	Loan correspondents and brokers Loan correspondents.....	Part 6162	Mortgage bankers and correspond- ents
	Loan brokers.....	6163	Loan brokers
6312	Stock life insurance companies.....		
6313	Mutual life insurance companies.....	6311	Life insurance
6319	Life insurance carriers, nec.....		
6322	Stock accident and health insurance.....		
6323	Mutual accident and health insurance.....	6321	Accident and health insurance
6329	Accident and health insurance, nec.....		
6332	Stock fire, marine, and casualty.....		
6333	Mutual fire, marine, and casualty.....	Part 6331	Fire, marine & casualty insurance
6339	Fire, marine, and casualty, nec.....		
6352	Bank deposit insurance.....	Part 6399	Insurance carriers, nec
6399	Insurance carriers, nec Boiler insurance.....	Part 6331	Fire, marine & casualty insurance
	Pension, health, and welfare funds.....	6371	Pension, health, and welfare funds
	Insurance carriers, nec.....	Part 6399	Insurance carriers, nec

See footnotes at end of table.

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STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
	G. FINANCE, INSURANCE, AND REAL ESTATE—Continued		
6515	Agricultural property lessors.....	6519	Real property lessors, nec
6516	Mining and oil property lessors.....		
6518	Public utility property lessors.....		
6519	Real property lessors, nec.....		
6561	Operative builders.....	1531	Operative builders
6794	Patent owners and lessors.....	Part 6794	Patent owners and lessors
	H. SERVICES		
7011	Hotels, tourist courts, and motels.....	Part 7011	Hotels, motels & tourist courts
7021	Rooming and boarding houses	7021	Rooming and boarding houses
	Rooming and boarding houses, nec....	Part 8361	Residential care
	Homes for aged and retarded.....	6515	Mobile home site operators
7031	Trailer parks.....	7033	Trailer parks for transients
7032	Sporting and recreational camps		
	Ski lodges and resorts.....	Part 7011	Hotels, motels & tourist courts
	Sporting and recreational camps, nec...	7032	Sporting and recreational camps
	Day camps, recreational.....	Part 7999	Amusement and recreation, nec
7041	Membership-basis organization hotels		
	Membership basis organization hotels, nec	7041	Membership-basis organization hotels
	Homes for aged or retarded.....	Part 8361	Residential care
7212	Laundries, except power.....	Part 7219	Laundry and garment services, nec
7215	Coin-operated laundries and cleaning....	Part 7215	Coin-operated laundries and clean- ing
7217	Rug cleaning and repairing plants.....	Part 7217	Carpet and upholstery cleaning
7221	Photographic studios.....	7221	Photographic studios, portrait
7271	Garment pressing, alteration, repair	Part 7333	Commercial photography and art
	Agents for laundries & dry cleaners...	7212	Garment pressing & cleaners' agents
	Garment alteration and repair.....	Part 7219	Laundry and garment services, nec
7299	Miscellaneous personal services		
	Coin-operated laundry routes.....	Part 7215	Coin-operated laundries and clean- ing
	Carpet and upholstery cleaning on customer's premises	Part 7217	Carpet and upholstery cleaning
	Miscellaneous personal services.....	Part 7299	Miscellaneous personal services
7321	Credit reporting and collection		
	Credit card service, collection by central agency	Part 6153	Short-term business credit
	Credit reporting and collection.....	7321	Credit reporting and collection

See footnotes at end of table.

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
	H. SERVICES—Continued		
7391	Research & development laboratories....	Part 7391	Research & development laboratories
7392	Business consulting services		
	Computer software services.....	7372	Computer programming and software
	Calculating services (computer).....	Part 7374	Data processing services
	Computer consulting, exc. programming	Part 7379	Computer related services, nec
	Management and consulting services..	7392	Management and public relations
	Interior decorating; telephone solicitation	Part 7399	Business services, nec
7393	Detective and protective services.....	Part 7393	Detective and protective services
7394	Equipment rental and leasing		
	Finance leasing of equipment.....	Part 6159	Misc. business credit institutions
	Computer leasing, exc. finance.....	Part 7379	Computer related services, nec
	Equipment rental and leasing.....	7394	Equipment rental and leasing
7398	Temporary help supply service.....	7362	Temporary help supply services
7399	Business services, nec		
	Silk screen designing.....	Part 7333	Commercial photography and art
	Personnel supply, nec.....	7369	Personnel supply services, nec
	Servicing mechanical protective devices	Part 7393	Detective and protective services
	Miscellaneous business services.....	Part 7399	Business services, nec
7512	Passenger car rental and leasing		
	Finance leasing.....	Part 6159	Misc. business credit institutions
	Other.....	7512	Passenger car rental and leasing
7513	Truck rental and leasing		
	Finance leasing.....	Part 6159	Misc. business credit institutions
	Other.....	7513	Truck rental and leasing
7549	Automobile services, nec		
	Automobile services, nec.....	7549	Automotive services, nec
	Auto driving instruction.....	Part 8299	Schools & educational services, nec
7629	Electrical repair shops, nec		
	Computer maintenance and repair....	Part 7379	Computer related services, nec
	Electrical repair shops, nec.....	7629	Electrical repair shops, nec
7815	Production of still, slide films.....	Part 7333	Commercial photography and art
7816	Motion picture film exchanges.....	7823	Motion picture film exchanges
7817	Film or tape distribution for TV.....	7824	Film or tape distribution for TV
7818	Motion picture distribution services.....	7829	Motion picture distribution services
7821	Motion picture production service.....	7819	Services allied to motion pictures
7942	Public golf courses.....	7992	Public golf courses

See footnotes at end of table.

STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 Industry		1972 Industry	
Code	Short title	Code	Short title
	H. SERVICES—Continued		
7943	Coin-operated amusement devices.....	7993	Coin-operated amusement devices
7945	Skating rinks.....	Part 7999	Amusement and recreation, nec
7946	Amusement parks.....	7996	Amusement parks
7947	Golf clubs and country clubs.....	Part 7997	Membership sports & recreation clubs
7949	Amusement and recreation, nec		
	Music licensing to radio stations.....	Part 6794	Patent owners and lessors
	Music distribution systems, not coin-operated	Part 7399	Business services, nec
	Membership sports clubs, exc. golf.....		
	Amusement and recreation, nec.....	Part 7997	Membership sports & recreation clubs
8061	Hospitals.....	Part 7999	Amusement and recreation, nec
8092	Sanitoria, convalescent & rest homes.....	8062	General medical & surgical hospitals
8099	Health and allied services, nec	8063	Psychiatric hospitals
	Optometrists.....	8069	Specialty hospitals, exc. psychiatric
	Health practitioners, nec.....	8051	Skilled nursing care facilities
	Outpatient care facilities.....	8059	Nursing and personal care, nec
	Health and allied services, nec.....		
	Rehabilitation centers.....	8042	Offices of optometrists
8211	Elementary and secondary schools	8049	Offices of health practitioners, nec
	Elementary and secondary schools, nec.	8081	Outpatient care facilities
	Nursery schools.....	8091	Health and allied services, nec
8242	Vocational schools	Part 8331	Job training and related services
	Data processing schools.....		
	Business and secretarial schools.....	8211	Elementary and secondary schools
	Vocational schools, nec.....	Part 8351	Child day care services
	Flying instruction.....		
8299	Schools & educational services, nec	8243	Data processing schools
	Schools and educational services, nec..	8244	Business and secretarial schools
	Rehabilitation counseling.....	8249	Vocational schools, nec
8411	Museums and art galleries	Part 8299	Schools & educational services, nec
	Commercial museums.....		
	Noncommercial museums and art galleries	Part 8299	Schools & educational services, nec
		Part 8331	Job training and related services
		Part 7999	Amusement and recreation, nec
		8411	Museums and art galleries

See footnotes at end of table.

RELATION OF 1967 TO 1972 SIC INDUSTRIES

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(For all industries other than those listed below, 1972 SIC industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 Industry		1972 Industry	
Code	Short title	Code	Short title
	H. SERVICE—Continued		
8421	Botanical and zoological gardens		
	Commercial exhibits.....	Part 7999	Amusement and recreation, nec
	Noncommercial botanical gardens, etc.	8421	Botanical and zoological gardens
8611	Business associations		
	Dairy herd improvement.....	Part 0751	Livestock services, exc. specialties
	Business associations, nec.....	8611	Business associations
8671	Charitable organizations		
	Individual and family services.....	Part 8321	Individual and family services
	Vocational rehabilitation, nec.....	Part 8331	Job training and related services
	Child development, exc. nursery.....	Part 8351	Child day care services
	Homes for children, aged, retarded.....	Part 8361	Residential care
	Social services.....	Part 8399	Social services, nec
8699	Nonprofit member organizations, nec		
	Funding organizations.....	Part 8399	Social services, nec
	Nonprofit membership organizations..	8699	Membership organizations, nec
8921	Research agencies		
	Research & development laboratories..	Part 7391	Research & development labora-
			tories
	Noncommercial research organizations..	8922	Noncommercial research organiza-
			tions
8931	Accounting, auditing & bookkeeping		
	Tax preparation service.....	Part 7299	Miscellaneous personal services
	Data processing services.....	Part 7374	Data processing services
	Accounting, auditing & bookkeeping..	8931	Accounting, auditing & bookkeep-
			ing
8999	Services, nec		
	Commercial art.....	Part 7333	Commercial photography and art
	Marriage counseling.....	Part 8321	Individual and family services
	Services, nec.....	8999	Services, nec

See footnotes at end of table.

STANDARD INDUSTRIAL CLASSIFICATION

(For all industries other than those listed below, 1972 SIO industries are the same as in 1967 or the changes in the industries will affect the classification of few, if any, establishments)—Con.

1967 industry		1972 industry	
Code	Short title	Code	Short title
	I. GOVERNMENT *		
		4311	U.S. Postal Service
		9111	Executive offices
		9121	Legislative bodies
		9131	Executive and legislative combined
		9199	General government, nec
		9211	Courts
		9221	Police protection
		9222	Legal counsel and prosecution
		9223	Correctional institutions
		9224	Fire protection
		9229	Public order and safety, nec
		9311	Finance, taxation & monetary policy
		9411	Admin. of educational programs
		9431	Admin. of public health programs
		9441	Admin. of social & manpower programs
9190 *	Federal Government.....	9451	Admin. of veterans' affairs
9290 *	State government.....	9511	Air, water & solid waste management
9390 *	Local government.....	9512	Land, mineral, wildlife conservation
9490 *	International government.....	9531	Housing programs
		9532	Urban and community development
		9611	Admin. of general economic programs
		9621	Regulation, admin. of transportation
		9631	Regulation, admin. of utilities
		9641	Regulation of agricultural marketing
		9651	Regulation misc. commercial sectors
		9661	Space research and technology
		9711	National security
		9721	International affairs

¹ No change in content.

² The classification of separate establishments milling or otherwise preparing nonmetallic minerals in this division and in Industry 3295 has been clarified. Industry 3295 will include only establishments crushing or grinding or otherwise preparing minerals mined in Industry Groups 145 and 149, and Industry 1472. Establishments crushing or grinding minerals mined in Industry Groups 142 and 144 and Industries 1473 to 1479 are included in those same industries.

² The Special Trade Contractors in Major Group 17 were changed to include special trade contractors engaged in work on heavy or engineering construction as well as building construction.

* This industry is limited to the primary and semifinished metals forms, with finished products such as axles, wheels, and air ducts transferred to more specific industries.

• Wholesale.

* Although not individually noted, government-owned business-type establishments that were coded using major group codes for the 3d and 4th digits, are now classified to the full 4-digit industry instead of in the Government Division.

Appendix D

Principles and Procedures Used in This Revision of the Standard Industrial Classification Manual

A. Purpose and Scope

This SIC was developed for use in the classification of establishments¹ or kind-of-activity units by type of economic activity in which engaged. It is a classification of establishments, rather than legal entities or enterprises, by kinds of business, and not by occupations or commodities. It encompasses all economic activity.

The purposes of this SIC are to facilitate the collection, tabulation, presentation, and analysis of data relating to establishments and to promote uniformity and comparability in the presentation of statistical data collected by various agencies of the U.S. Government. It is also used by State agencies, trade associations, private business, and other organizations.

The basic purpose and objective of a periodic review is to update the classification so as to make it possible to better reflect statistically the existing industrial structure of the economy. It should provide the means for introducing new industry detail resulting from economic growth or technological change, as well as for deleting industries no longer significant.

B. Principles for Review of the Classification

In the review of the structure and detail of the 1967 edition of the establishment SIC Manual, the Technical Committee was guided by the general principles described below. These principles were also to be taken into consideration by others, both within and outside of Government, in the preparation of proposed changes.

(1) *Structure of the classification.*—The classification should conform to the actual structure of industry as it is found to exist in the American economy. It does not, therefore, follow any single principle, such as the use of the products, market structure, the nature of the raw materials, etc.

(2) *Unit of classification.*—The SIC is designed to classify the establishment and the kind-of-activity unit according to kind of economic activity in which such units are engaged. It distinguishes operating establishments or kind-of-activity units from central administrative office and auxiliary establishments.

An *operating establishment* is an economic unit which produces goods or services—for example, a farm, a mine, a factory, a store. In most instances, the establishment is at a single physical location; and it is engaged in one, or predominantly one, type of economic activity for which an industry code is applicable.

¹ Wherever the term "establishment" is used in the sections following, it is meant to also cover the kind-of-activity unit.

Where a single physical location encompasses two or more distinct and separate economic activities for which different industrial classification codes seem applicable, such activities should be treated as separate establishments and classified in separate industries, provided it is determined that: (1) no one industry description in the Standard Industrial Classification includes such combined activities; (2) the employment in each such economic activity is significant; (3) such activities are not ordinarily associated with one another at common physical locations; and (4) reports can be prepared on the number of employees, their wages and salaries, and other establishment type data.

An *operating kind-of-activity unit* differs from the establishment in that there is no restriction with respect to the geographic area in which the activity of the unit is carried on. The kind-of-activity unit, which applies to activities such as construction, transportation, and communication, generally carries on the same kind of activity over a more or less wide geographic area, and frequently necessary records relating to such activity for a given portion of the area are not maintained.

An establishment or kind-of-activity unit is not necessarily identical with a legal entity or enterprise, which may consist of one or more establishments or kind-of-activity units. Also, it is to be distinguished from organizational subunits or departments within an establishment or kind-of-activity unit. Supplemental interpretations of the definition of an establishment or kind-of-activity unit are included in the industry descriptions of this Standard Industrial Classification.

A *central administrative office* is an establishment primarily engaged in management and general administrative functions performed centrally for other establishments of the same company.

An *auxiliary unit* is an establishment primarily engaged in performing supporting services for other establishments of the same company rather than for the general public or for other business firms.

Activities of the type performed at separate administrative offices and auxiliary establishments are, in fact, normally carried on as an integral part of individual operating establishments. Hence, this type of activity is only partially measured by the statistics on separately reported central administrative offices and auxiliary establishments.

(3) *Basis of classification.*—Each establishment is to be classified according to its major activity as defined by the four-digit industries. Major activity is to be determined by the product or group of products produced or handled, or service rendered. Ideally, the principal product or service should be determined by reference to "value added." In practice, however, it is rarely possible to obtain this information for individual products or services, and it becomes necessary to adopt some other criteria* which may be expected to give approximately the same results.

(4) *Economic significance.*—To be recognized as an industry, each group of establishments must have significance from the standpoint of number of persons employed, volume of business and other economic factors, such as number of establishments,

* Other criteria include data on value of production, shipments, sales or receipts, payroll, number of employees, etc.

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payroll, or value added. These factors were taken into account in determining the economic significance of an industry by relating the totals for the industry to the average for all industries in the same economic division (mining, manufacturing, etc.)

Generally speaking, an existing SIC industry was considered as sizable if the weighted average of the factors represents 10 percent or more of the average industry in the same division. A new industry, however, had to attain a score of 20 percent or more of the average industry.

Note that an exception to the principle of economic significance was found in the grouping of establishments into "residual" industries described as "not elsewhere classified."

In order that an industry at the most detailed level of classification, properly reflects the activity being measured, the output (goods and services) of the establishments in the industry must: (1) consist largely of those goods and services defining the industry; and (2) account for the bulk of the specified goods and services provided by all establishments.

For manufacturing industries these factors were measured by the primary product specialization and coverage ratios, respectively.

The *primary product specialization ratio* describes the proportion of product shipments (both primary and secondary) of the industry represented by those products defining the industry. The *coverage ratio* is the proportion of total shipments by all manufacturing establishments of products defining the industry shipped by establishments classified in the industry.

The minimum ratio for primary product specialization was 80. When applying the specialization test, it was recognized that an industry sometimes specializes in only one product (malt or beet sugar). In other instances, establishments in an industry may typically produce and thus specialize in a wide variety of products (as in meat packing plants; blast furnaces, steel works, and rolling mills; and radio and television transmitting, signaling, and detection equipment and apparatus). For varying reasons, industries have through the years developed in a diverse manner. In such instances it is important, therefore, that the specialization ratios be applied and interpreted in the light of the typical product mix defining the particular industry.

In applying coverage ratio factors, separate criteria were established for industries with "captive" output within and outside the industry as distinguished from industries primarily producing for commercial sale. The minimum coverage ratio for industries described in the Standard Industrial Classification as producing for commercial sale was 70, whereas the coverage ratio for all other industries was 50, except for industries producing from purchased materials (stage of process classification). The minimum coverage ratio for this latter group of industries (e.g., blended and prepared flour, etc.) was 33. The coverage ratio for industries with significant "captive" counterparts (minimum coverage of 50 percent) was computed on the basis of the proportion of total output accounted for by the given industry (shipments for sale, interplant transfer, and production for use within the same establishment) compared with total output in all industries (shipments for sale, interplant transfer, as well as production for use within the same establishment).

The application of the size, specialization, and coverage criteria to a particular industry was subject to other considerations. Industries which appear to qualify because of special or unique factors not included in the formula described above may be retained. Examples of such factors are defense mobilization, very large industries with specialization slightly below 80 percent, and industries of special significance in economic fluctuations which are also near the lower specialization limit, such as machine tools.

Separate industries for establishments primarily engaged in activities that are rapidly expanding but which did not meet the quantitative measures in the usual reference statistics, also were established. Such separate industry identification was based on statistical evidence of current size, growth by a specified time, and on the customary requirements, other than size, for establishing new industries.

C. Considerations in Evaluating Proposed Changes

Proposals for new or amended industry definitions (four-digit), as well as for the transfer of present industries to other Industry Groups (three-digit), Major Groups (two-digit), or Economic Divisions, were evaluated on the basis of the following considerations:

- (1) Proposals for change were to be accompanied by detailed statistical justification of adherence to the criteria described in section B above. It was recognized that exact data were not always available; nevertheless, as much evidence as possible was to be provided to justify a change. Changes that would cross three-digit and two-digit SIC lines required stronger justification than those that were confined within an existing three-digit Industry Group. Here, especially, the alteration in the size and composition of the Industry Group from which the products or services were taken should have been ascertained and the proposed revision should have strengthened or clarified and not weakened the existing groups. Modifications crossing industry division lines such as manufacturing to nonmanufacturing needed even more careful consideration.
- (2) In proposing new industries, it was essential to recognize the effect of the amendments on existing industries and on the continuity of statistical series. A significant weakening of a statistically sound existing industry or series was an argument against constituting a new category. The position paper by the proponent for a change must have dealt with the consequences on the industries affected. Except for the relatively rare instances where a product or service has been newly created in recent years, it was to be realized that the activity is presently assigned to some classification within the SIC. The subdivision of an existing industry into two or more qualifying industries would permit the development of statistics comparable with the past and would, therefore, receive more favorable consideration.
- (3) Proposed amendments were evaluated on the basis of costs, in terms of time and money to government agencies, business and other users of the classification, incurred in changing current records and for collection of

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new data necessary for the revised code determination; and effect of change in terms of burden on respondent, or availability of information in respondent records.

- (4) Proposed new industries were evaluated on the basis of data from the most current economic census and other appropriate sources relevant to the criteria followed in establishing new industries.
- (5) The Technical Committee took cognizance of the International Standard Industrial Classification (ISIC) insofar as comparability with the United States establishment SIC is affected by proposed revisions.

D. Clearance Procedure

All amendments to the 1967 edition of the establishment SIC Manual proposed by the Technical Committee were submitted to appropriate industry and labor representatives for review and comment prior to final action by the Committee. Industry and labor clearances were conducted primarily through established Office of Management and Budget advisory organizations; namely, the Business Advisory Council on Federal Reports, and the Labor Advisory Committee.

E. Clarification and Interpretation of Industry Definitions

Proposed amendments in present industry definitions having no effect on the scope of industrial activity included but designed to improve interpretation of the industry, as well as all proposed new index items and amendments in present index items, were processed by the Committee on Code Assignment and Interpretation.

F. Time Schedule

All proposed amendments to the 1967 edition of the establishment SIC Manual were to be submitted to the Chairman of the Technical Committee on Industrial Classification as soon as possible, and no later than June 30, 1970, to permit transmittal of Technical Committee recommendations to the Office of Management and Budget by January 1, 1971. The Office of Management and Budget submitted proposed final drafts of the revised classification to appropriate industry and labor groups and individuals for review and comment prior to its final decision. The revised edition of the classification is effective on January 1, 1972.



EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET

1977
SUPPLEMENT

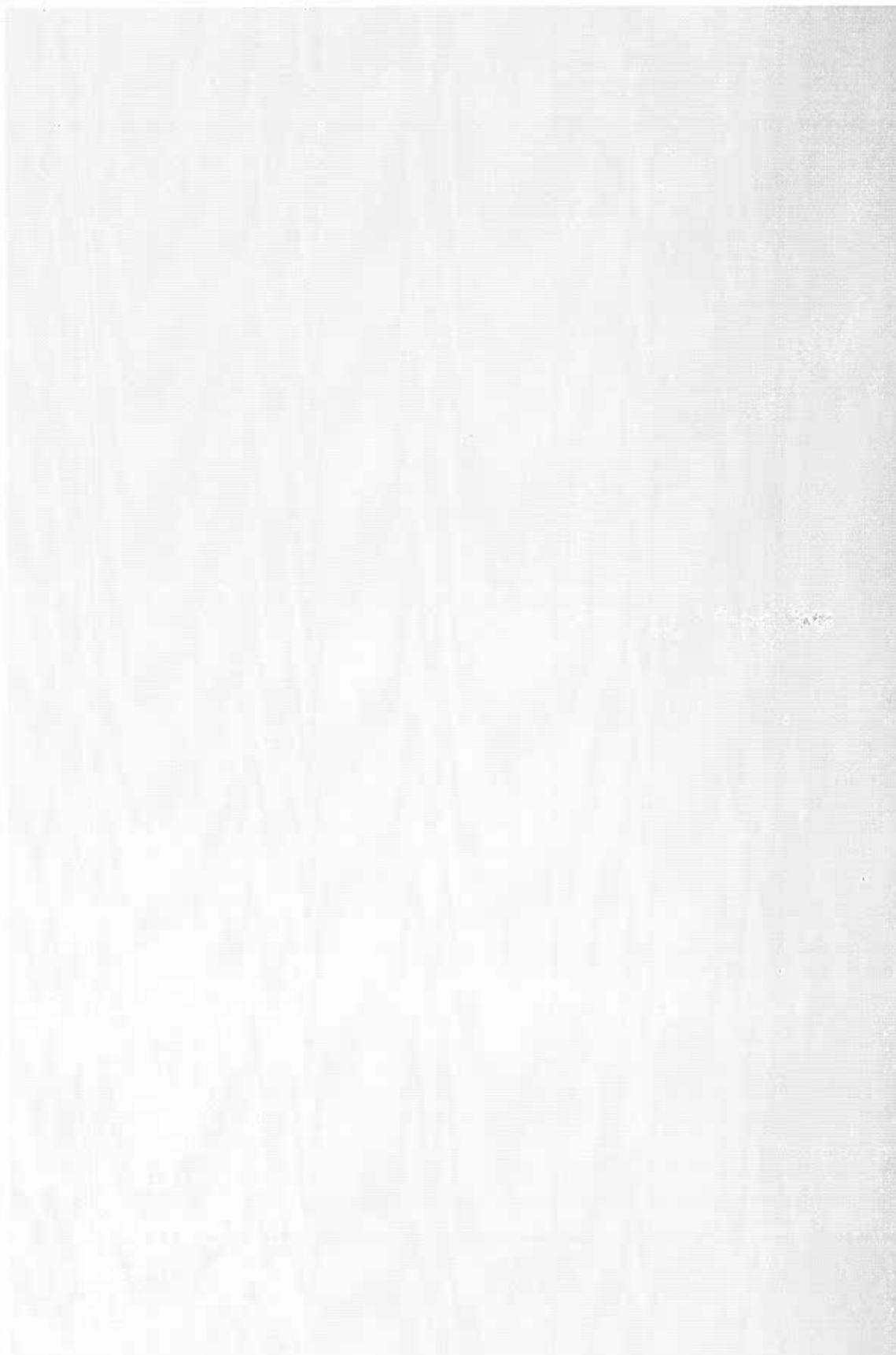


STANDARD
INDUSTRIAL
CLASSIFICATION
MANUAL

1972



U.S. DEPARTMENT OF COMMERCE
OFFICE OF FEDERAL STATISTICAL POLICY AND STANDARDS



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INTRODUCTION

This supplement is issued by the newly created Office of Federal Statistical Policy and Standards in the Department of Commerce which has assumed the statistical policy function formerly assigned to the Statistical Policy Division of the Office of Management and Budget. Implementation and maintenance of standard statistical classifications will be handled by the new Office under the authority of Section 103 of the Budget and Accounting Procedures Act of 1950.

Both the Standard Industrial Classification Manual 1972 and the Enterprise Standard Industrial Classification Manual 1974 are updated by this supplement.

This supplement contains new, deleted and modified industries, titles, definitions, and index items. It reflects the results of the experience of government agencies in using the 1972 Standard Industrial Classification.

The 1977 review of the Standard Industrial Classification serves primarily to make corrections to the 1972 edition in areas crucial to statistical programs. Only those changes proposed by member agencies of the Technical Committee on Industrial Classification were considered. Based on a Technical Committee recommendation, a review of the Manual is scheduled for 1982.

This supplement was prepared based on recommendations from the Technical Committee on Industrial Classification. However, the Office of Federal Statistical Policy and Standards is responsible for the final decisions.

The Technical Committee is composed of representatives of the following agencies: Federal Trade Commission, Bureau of Mines, U.S. Small Business Administration, Social Security Administration, Bureau of Economic Analysis, U.S. International Trade Commission, Employment and Training Administration, Securities and Exchange Commission, Bureau of Domestic Commerce, Board of Governors of the Federal Reserve System, Bureau of the Census, General Services Administration, Office of Federal Statistical Policy and Standards, U.S. Department of Agriculture, Bureau of Labor Statistics, Internal Revenue Service and National Center for Health Statistics.



PART I

New and Deleted Industries

A new Industry 3716—**Motor Homes** was created from Industry 3792—Travel Trailers and Campers.

3716 Motor Homes

Establishments primarily engaged in manufacturing self-contained motor homes on purchased chassis. Establishments engaged in manufacturing self-contained motor homes on chassis manufactured in the same establishment are classified in Industry 3711. Establishments primarily engaged in manufacturing mobile homes are classified in Industry 2451, and travel trailers and pickup campers in Industry 3792.

(The references to self-contained motor homes in the description of Industry 3792 are deleted and the 'self-contained motor homes' entries under the industry description and in the alphabetic index should be changed to 3716.)

Industry Group 404 and Industry 4041—**Railway Express Service** have been deleted.

There is no longer any activity in this industry.

A new Industry 6798—**Real Estate Investment Trusts** was created from Industry 6799—Investors, Not Elsewhere Classified.

6798 Real Estate Investment Trusts

Establishments primarily engaged in closed-end investments in real estate or related mortgage assets operating so that they could meet the requirements of the Real Estate Investment Trust Act of 1960 as amended. This act exempts trusts from corporate income and capital gains taxation, provided they invest primarily in specified assets, pay out most of their income to shareholders, and meet certain requirements regarding the dispersion of trust ownership.

(The item "real estate investment trust" in the alphabetic index should be changed to 6798 and should also appear under the description of this new industry. The add items listed in Part III should also appear under this description.)

1/24/19



PART II

Modifications to Industry Descriptions

The following changes in industry titles or descriptions have been made to correct or clarify these industries, or to recognize changes that have occurred within the industrial structure of those industries. The italics show changes from the existing description.

- 0721 Add at the end of Industry description of **0721—Crop Planting, Cultivating and Protection**: *"Establishments providing water for irrigation, as well as irrigation services, are classified in Industry 4971—Irrigation Systems."*
- 2282 Replace the industry description for **2282—Yarn Texturizing, Throwing, Twisting, and Winding Mills: Cotton, Man-Made Fibers and Silk** with "Establishments primarily engaged in texturizing, throwing, twisting, winding or spooling purchased yarns or man-made fiber filaments, wholly or chiefly by weight of cotton, man-made fibers or silk, *or in performing such activities on a commission basis.* Establishments primarily engaged in dyeing or finishing purchased yarns or finishing yarns on a commission basis are classified in Industry 2269. *Establishments primarily engaged in producing and texturizing man-made fiber filaments and yarns in the same plant are classified in Industry 2823 or 2824."*
- 2661 Add at the end of Industry description of **2661—Building Paper and Building Board Mills**: *"Establishments primarily engaged in manufacturing hardboard are classified in Industry 2499—Wood Products, Not Elsewhere Classified."*
- 346 Add at the end of the description of Industry Group **346—Metal Forgings and Stampings**: *"Establishments further processing forgings or stampings are classified according to the particular product or process."*
- 3544 Add to the description of Industry **3544—Special Dies and Tools, Die Sets, Jigs and Fixtures, and Industrial Molds**, the word "usually" after "manufacturing," in the first sentence.
- 3761 Replace the second sentence of the description of Industry **3761—Guided Missiles and Space Vehicles** with "Research and development, *including evaluation and simulation,* and other services *requiring thorough knowledge of complete guided missiles and space craft* are included in this industry."
- 4212 Replace the last clause of the description of Industry **4212—Local Trucking Without Storage** to read: "hauling of dirt, rock, etc. *by establishments primarily engaged in excavating or filling for construction projects in Division C.*"
- 4712 Delete the reference to REA Express in the description of Industry **4712—Freight Forwarding**.
- 4833 Replace the word "radio" in the first line of the description of Industry **4833—Television Broadcasting** with "television".
- Div. F Add at the end of the description of the **Wholesale Trade Division**: *"Auctioneering services on a commission or fee basis provided at the seller's site are classified in Industry 7399."*
- Div. G Add at the end of the description of the **Retail Trade Division**: *"Auctioneering services on a commission or fee basis provided at the seller's site are classified in Industry 7399."*

- 5999 Add to the description of Industry **5999—Miscellaneous Retail Stores, Not Elsewhere Classified**, the phrase "*other than books*" after "religious goods".
- 6411 Add at the end of the description of Industry **6411—Insurance Agents, Brokers, and Service**, "*Establishments engaged in searching real estate titles are classified in Industry 6541.*"
- 7231 Replace the industry description for **7231—Beauty Shops**, with "Establishments primarily engaged in furnishing beauty or hairdressing services. This industry also includes combination beauty and barber shops as well as hairdressing shops serving both male and female clientele."
- 7299 Add at the end of the description of Industry **7299—Miscellaneous Personal Services**, "*Establishments engaged in providing income tax return preparation services which also provide accounting, auditing, or bookkeeping services are classified in Industry 8931.*"
- 8931 Replace the last sentence of the description of Industry **8931—Accounting, Auditing, and Bookkeeping Services**, with "Establishments engaged in providing income tax return preparation services without accounting, auditing or bookkeeping services are classified in Industry 7299."

PART III**Modifications to Index Items**

The following index items have been added or deleted to clarify the content of the specified industries. These changes should be made to both the industry description index items and the alphabetical lists in the back of the manual.

****	<i>Add</i>	Exporters—classify in trade according to commodity. ¹
****	<i>Add</i>	Importers—classify in trade according to commodity. ¹
0721	<i>Add</i>	Irrigation system operation service (not providing water)
0723	<i>Delete</i>	Alfalfa cubing
	<i>Delete</i>	Grist mills, custom
	<i>Delete</i>	Hay cubing
	<i>Delete</i>	Milling of flour, feed, and grain: custom
0811	<i>Add</i>	Christmas tree growing
1521	<i>Add</i>	Mobile home repair, on site—general contractors
1711	<i>Add</i>	Air conditioning: with or without sheet metal work—contractors ²
1742	<i>Delete</i>	Sheetrock installation—contractors
1771	<i>Delete</i>	Sidewalk construction—contractors
1799	<i>Add</i>	Mobile home site set up and tie down—contractors
2048	<i>Add</i>	Alfalfa, cubed
	<i>Add</i>	Hay, cubed
2282	<i>Delete</i>	Textured yarns
	<i>Add</i>	Textured yarns, <i>mspm</i> ³
2328	<i>Add</i>	Jeans: men's, youths', and boys'
2339	<i>Add</i>	Jeans: women's, misses', and juniors'
2392	<i>Delete</i>	Hassocks
	<i>Add</i>	Hassocks, textile
2492	<i>Add</i>	Particleboard, plastic laminated: made in particleboard plants
2531	<i>Delete</i>	Chairs, portable folding: wood or metal
	<i>Add</i>	Chairs, portable folding
2541	<i>Delete</i>	Plastic laminate over particleboard (fixture tops)
2611	<i>Add</i>	De-inking of newsprint
2649	<i>Add</i>	Hats, paper: <i>mspm</i> ³

2661	Delete	Board, building: composition, cellular fiber and or hardpressed— <i>mitse</i> ⁴
	Add	Board, building: composition, cellular fiber— <i>mitse</i> ⁴
	Delete	Insulation board, cellular fiber or hard pressed (without gypsum)— <i>mitse</i> ⁴
	Add	Insulation board, cellular fiber (without gypsum)— <i>mitse</i> ⁴
	Delete	Wallboard, except gypsum: cellular fiber or hard pressed— <i>mitse</i> ⁴
	Add	Wallboard, except gypsum: cellular fiber— <i>mitse</i> ⁴
2741	Delete	Music, book or sheet: publishing and printing, or publishing only
	Add	Music, sheet: publishing and printing, or publishing only
2819	Add	Tungsten carbide powder, except abrasives or by metallurgical process
2822	Delete	Adiprene
	Delete	Hypalon
2823	Add	Textured yarns, cellulosic: made in chemical plants
2824	Add	Textured yarns, non-cellulosic: made in chemical plants
2834	Delete	Chapsticks
	Add	Lip balms
2869	Delete	Freon
3069	Add	Custom compounding of rubber materials
3295	Delete	Solite, ground or otherwise treated
3313	Add	Tungsten carbide powder by metallurgical process
3462	Add	Aircraft forgings, ferrous: not made in rolling mills
	Add	Automotive forgings, ferrous: not made in rolling mills
	Add	Bus, truck and trailer forgings, ferrous: not made in rolling mills
	Add	Construction and mining equipment forgings, ferrous: not made in rolling mills
	Add	Engine forgings, ferrous: not made in rolling mills
	Add	Flange, valve, and pipe fitting forgings, ferrous: not made in rolling mills
	Add	Internal combustion engine (stationary and mobile) forgings, ferrous: not made in rolling mills
	Add	Machinery forgings, ferrous: not made in rolling mills
	Add	Mechanical power transmission forgings, ferrous: not made in rolling mills
	Add	Missile forgings, ferrous: not made in rolling mills
	Add	Nuclear power plant forgings, ferrous: not made in rolling mills
	Add	Ordnance forgings, ferrous: not made in rolling mills
	Add	Pole line hardware forgings, ferrous: not made in rolling mills
	Add	Pump and compressor forgings, ferrous: not made in rolling mills
	Add	Turbine engine forgings, ferrous: not made in rolling mills

3463	Add	Aircraft forgings, nonferrous: not made in hot rolling mills
	Add	Automotive forgings, nonferrous: not made in hot rolling mills
	Add	Bearing and bearing race forgings, nonferrous: not made in hot rolling mills
	Add	Engine and turbine forgings, nonferrous: not made in hot rolling mills
	Add	Flange, valve and pipe fitting forgings, nonferrous: not made in hot rolling mills
	Add	Machinery forgings, nonferrous: not made in hot rolling mills
	Add	Mechanical power transmission forgings, nonferrous: not made in hot rolling mills
	Add	Missile forgings, nonferrous: not made in hot rolling mills
	Add	Ordnance forgings, nonferrous: not made in hot rolling mills
	Add	Plumbing fixture forgings, nonferrous: not made in hot rolling mills
	Add	Pole line hardware forgings, nonferrous: not made in hot rolling mills
	Add	Pump and compressor forgings, nonferrous: not made in hot rolling mills
3469	Add	Waste baskets, stamped metal
3523	Add	Cabs, for agricultural tractors
3531	Add	Cabs, for off-highway trucks
3536	Delete	Go-devils (hydraulic crane, pneumatic tired)
3537	Add	Cabs, for industrial trucks
3545	Delete	Loading, unloading, and transfer devices
3559	Add	Stone tumblers
3564	Add	Air cleaning systems
3566	Add	Drives, high speed industrial
3568	Add	Drives: belt, cable, chain, rope, and sprocket
3589	Add	Trash compactors, commercial
3631	Delete	Microwave ovens, household
	Add	Microwave ovens, household including portable
3634	Delete	Ovens, household: portable
	Add	Ovens, household portable: except microwave
3699	Add	Electric warm air furnaces
3713	Delete	Cabs, for agricultural tractors
	Delete	Cabs, for industrial trucks
3716	Add	Self-contained motor homes
3792	Delete	Automobile house trailer chassis
	Delete	House trailers, except as permanent dwellings
	Delete	Self-contained motor homes
	Delete	Trailers, house: except as permanent dwellings
	Add	Travel trailer chassis
3799	Delete	Automobile trailer chassis, except house trailer chassis
	Add	Automobile trailer chassis, except travel trailers

4041	Delete	Railway express service
	Delete	REA Express
4925	Add	Synthetic natural gas from naphtha. production and distribution
5012	Add	Snowmobiles—wholesale
5013	Add	Automobile service station equipment—wholesale
	Add	Garage service equipment—wholesale
5021	Add	Church pews—wholesale
	Add	School desks—wholesale
	Add	Theater seats—wholesale
5023	Add	Stainless steel flatware—wholesale
5065	Delete	Hearing aids—wholesale
5075	Add	Automotive air conditioners—wholesale
5086	Add	Drafting tables—wholesale
	Add	Hearing aids—wholesale
5093	Delete	Reclaiming iron and steel scrap from slag—wholesale
5133	Add	Double knit goods—wholesale
5134	Delete	Knit fabrics—wholesale
	Add	Knit fabrics, except double knit—wholesale
5149	Add	Hop extract—wholesale
	Add	Malt extract—wholesale
	Add	Malt—wholesale
	Add	Molasses, industrial—wholesale
	Add	Sausage casings—wholesale
5199	Delete	Hop extract—wholesale
	Delete	Malt extract—wholesale
	Delete	Malt—wholesale
	Delete	Molasses, industrial—wholesale
	Delete	Sausage casings—wholesale
5531	Add	Speed shops
5999	Delete	Religious goods stores—retail
	Add	Religious goods stores (other than books)—retail
6149	Delete	Axias
6159	Add	Intermediate investment "banks"
6351	Add	Mortgage insurance or guaranty
6361	Delete	Mortgage insurance or guaranty
6399	Add	Federal Deposit Insurance Corporation
	Add	Federal Savings and Loan Insurance Corporation

6798	<i>Add</i>	Mortgage investment trusts
	<i>Add</i>	Mortgage trusts
	<i>Add</i>	Real estate investment trusts
	<i>Add</i>	Realty investment trusts
	<i>Add</i>	Realty trusts
	<i>Add</i>	REIT's
7011	<i>Delete</i>	Camps, tourist
7231	<i>Add</i>	Unisex hairdressers
7399	<i>Delete</i>	Tool designers
	<i>Add</i>	Hand tool designers
	<i>Delete</i>	Welcome wagon service
	<i>Add</i>	Welcoming services
7948	<i>Add</i>	Dog racing
	<i>Delete</i>	Horses, breeding and racing
	<i>Add</i>	Horses, racing
	<i>Delete</i>	Kennels, dog racing
	<i>Delete</i>	Race horse owners
7999	<i>Delete</i>	Art galleries, commercial
8321	<i>Delete</i>	Homemaker's service
	<i>Add</i>	Homemaker's service, primarily non-medical
8911	<i>Delete</i>	Designing: ship, boat, machine, and product
	<i>Add</i>	Designing: ship, boat, and machine
	<i>Add</i>	Machine tool designers
9131	<i>Add</i>	Municipal and county government, nec
9651	<i>Add</i>	National Credit Union Administration

'Change alphabetic index only

'Change industry description index items only

'*mfp* is an abbreviation for "made from purchased materials or materials transferred from other establishments"

'*mitse* is an abbreviation for "made in the same establishment as the basic materials"

PART IV**Errata to the Standard Industrial Classification Manual 1972**

Page	SIC	Item
82	2311	The Industry title should be "Men's, Youths', and Boy's Suits, Coats, and Overcoats"
160	346	The codes for 346 and 3462 should be switched.'
394	0752	Horses, boarding or training (including race hourses)
425	0752	Training horses (including race horses)
447	2339	Aprons, except rubberized and plastic: women's, misses', and juniors'
448	2395	Art needlework, <i>mfp</i>
501	3644	Hardware, pole line
550	2952	Sheathing, asphalt saturated: made from purchased materials
612	—	The right column beginning with Industry 1961 should be raised one space'

'In first printing only.

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PART V

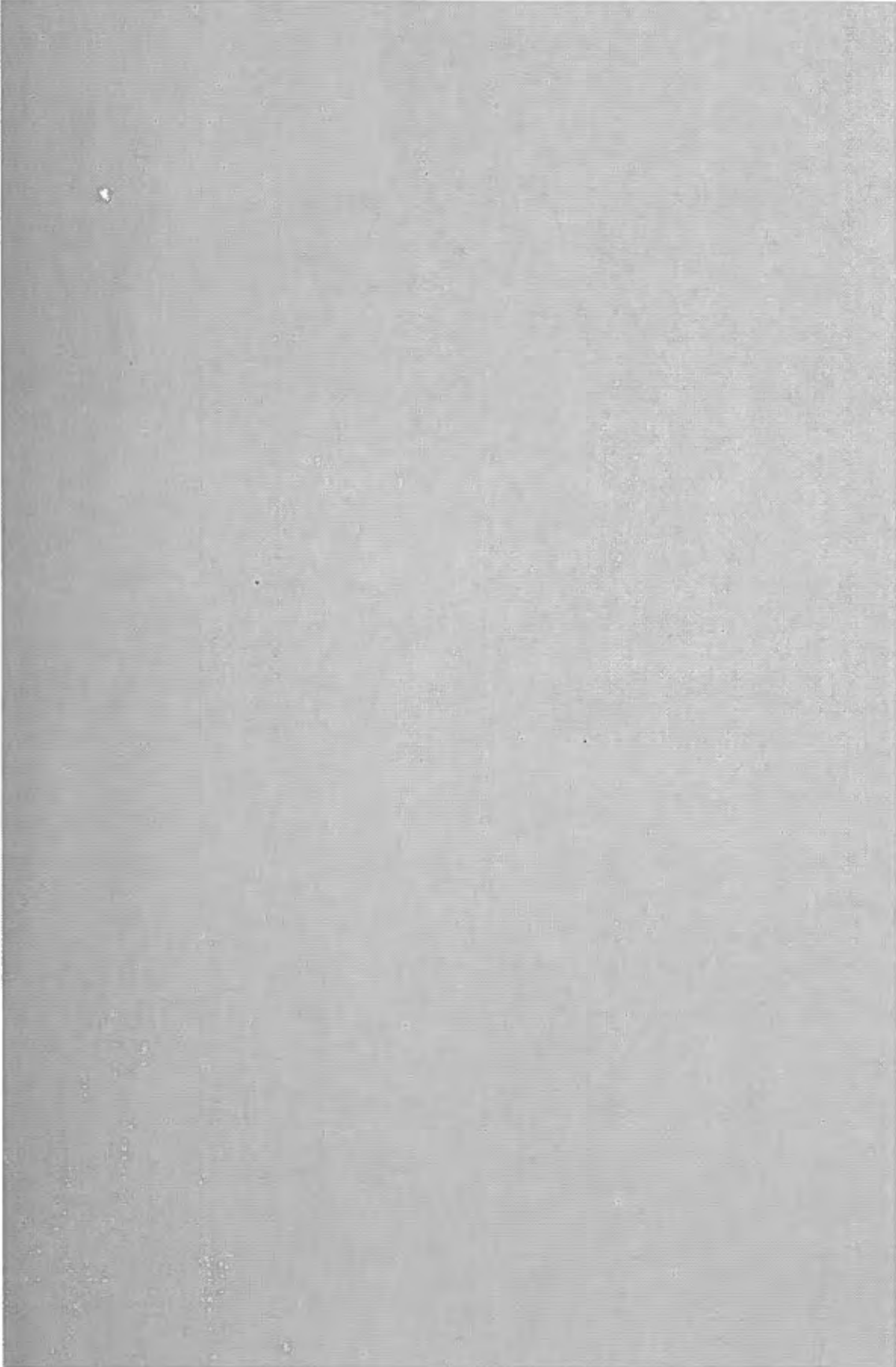
**Modifications to the
Enterprise Standard Industrial Classification Manual 1974**

The following changes should be made in the Enterprise Standard Industrial Classification Manual 1974.

The SIC code for ESIC Industry 67.98 should be changed to **6798**.

The SIC codes for ESIC Industry 67.99 should include all of **6799**.

The SIC codes for ESIC Industry 37.10 should include **3716**.





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PROTECTION AGENCY,



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Dated: January 24, 2019

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