

ILLINOIS POLLUTION CONTROL BOARD

NACME STEEL PROCESSING, L.L.C.,)	
)	
Petitioner,)	
)	
v.)	PCB 15-153
)	(Permit Appeal — Air)
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

**NACME STEEL PROCESSING LLC'S MOTION
FOR SUMMARY JUDGMENT**

NACME Steel Processing, L.L.C. (“NACME”) respectfully moves the Illinois Pollution Control Board (“Board”) pursuant to 35 Ill. Adm. Code 101.516 for summary judgment in its favor and against the Illinois Environmental Protection Agency (“IEPA”). The Board has previously ruled and the Record shows that there is no issue of material fact preventing entry of summary judgment in NACME’s favor in this appeal on the sole issue presented - the non-applicability of New Source Performance Standards to NACME’s oil coating operation. The Board has already unanimously ruled that the Standards of Performance for Metal Coil Surface Coating pursuant to 40 CFR 60 Subpart TT have no applicability to NACME, stating: *We only need to parse the latter part of the definition to conclude that the regulation does not apply to NACME’s facility.* (Order at 5; emphasis supplied)

Nonetheless IEPA has imposed the regulation on NACME in special conditions 2a and 2b in the Federally Enforceable State Operating Permit No. 031600FWL dated December 22, 2014 (“FESOP”) As such, NACME is entitled to summary judgment as a matter of law and the offending conditions should be stricken.

INTRODUCTION

The Board recently rejected the IEPA's motion for summary judgment in this case by order dated October 1, 2015 (hereafter, "Order"; appended hereto as Exh. A) NACME now moves for summary judgment and cites to the Board's Order for the undisputed background facts contained in the Record filed herein by the IEPA, and NACME further relies on the Board's legal conclusions based on these Record facts.

In its Order the Board found that NACME's coating operation does not meet Subpart TT's definition of finish coat operation and therefore denied the IEPA's motion for summary judgment. (Order at 7) The Board further found that because NACME did not move for summary judgment itself the issue of NACME's entitlement to summary judgment was not before it. (Id) (the relevant procedural history is cited in the Board's Order at p. 2) However, the Board's Order did not preclude NACME from moving for summary judgment.

BACKGROUND FACTS

As stated by the Board in its Order:

"NACME owns and operates a steel pickling facility at 429 West 127th Street in Chicago. Generally, pickling removes impurities such as rust or stains from the surface of metal. NACME, in particular, pickles coils of thin, flat steel to remove oxide scale. Some customers ask NACME to coat the pickled steel with rust preventative oil or lubrication oil. In these cases, NACME applies the appropriate oil, winds the steel into a coil, and ships the coil while still wet with oil.

IEPA issued an operating permit to NACME containing conditions requiring compliance with the New Source Performance Standards (NSPS) for metal coil surface coating operations, found at 40 C.F.R. Part 60, Subpart TT. Subpart TT regulates metal coil surface coating operations because the process emits volatile organic compounds in many instances. . . . Subpart TT applies to "affected facilities in a metal coil surface coating operation." 40 C.F.R. §

60.460(a) (2014). These affected facilities include “each finish coat operation.” *Id.* The dispute centers on whether coating steel coils with rust preventative or lubrication oil fits Subpart TT’s definition of finish coat operation.” (Order at 1)

The Board further states in its Order:

“The parties do not dispute the facts pertaining to NACME’s production process. At its facility, NACME pickles steel to remove oxide scale. R. at 252, 712. After pickling, NACME often applies rust preventative oil or lubrication oil to the steel. *Id.* The steel coils are transferred to the customer while coated in the oil and the customer removes the oil before use. R. at 97-104. There is no curing or quenching equipment at NACME’s facility and the steel coils are not dried before shipment. R. at 119-125.

Nor do the parties dispute the facts pertaining to the permitting process. In October 2005, NACME applied to IEPA for a permit to operate its facility. Nearly seven years later, on April 26, 2012, IEPA issued a draft operating permit. The draft permit’s conditions required compliance with Subpart TT. NACME asked IEPA to remove these requirements from the draft permit shortly after it was issued. It also attempted to appeal the draft permit in August 2012, but the Board ordered NACME to wait for the final permit before appealing.¹ IEPA issued the final operating permit on December 22, 2014. Exh. A to Pet. [Appended hereto as Exh. B] It contained the same Subpart TT requirements as the draft permit, so NACME petitioned the Board again. This time, because NACME appealed a final permit, the Board accepted the petition for hearing.” (Order at 2-3)

LEGAL BACKGROUND

As the Board stated in its Order:

“Section 111 of the federal Clean Air Act authorizes the U.S. Environmental Protection Agency (USEPA) to develop NSPS rules for specific categories of emission sources. 42 U.S.C. § 7411 (2014). Subpart TT contains the NSPS rules for metal coil surface coating operations. USEPA delegated administration of NSPS, including Subpart TT, to IEPA. The Illinois Environmental Protection Act (referred to here as the Act) authorizes IEPA to issue state operating permits containing federally enforceable provisions, including provisions to enforce Subpart TT. 415 ILCS 5/39.5 (2014). NACME’s operating permit with Subpart TT conditions is this kind of permit.

¹ NACME Steel Processing, L.L.C. v. IEPA, PCB 13-7 (Nov. 15, 2012).

A permit containing conditions may be appealed. 415 ILCS 5/40(a)(1) (2014). In a permit appeal, the Board must determine whether the disputed conditions are necessary to accomplish the purposes of the Act.² Section 9.1(b) of the Act states that its provisions are intended to be consistent with the federal Clean Air Act, which includes the NSPS program. So the Board must determine whether IEPA appropriately included Subpart TT requirements in the NACME's operating permit." (Order at 2)

The Board grants summary judgment when the record demonstrates that there is no issue of material fact and the moving party is entitled to judgment as a matter of law.³ (Id) In its Order the Board found that there was no issue of material fact but ruled that the IEPA was not entitled to judgment as a matter of law. (Order at 7)

The Board further found "whether NACME is entitled to summary judgment as a matter of law is not a question before the Board. However, today's order does not preclude NACME from moving for summary judgment in the future." (Id)

ARGUMENT

1. No Issue of Material Fact Precludes Summary Judgment in NACME's Favor

As the Board has stated, neither the IEPA nor NACME contend that there are material issues of fact precluding entry of summary judgment here. The Board previously agreed that there were no issues of material fact present in the Record. (Id) Whether the undisputed Record facts show that NACME is entitled to judgment as a matter of law is, thus, presently the sole issue before the Board.

² Sherex Chem. Co. v. IEPA, PCB 91-202, slip op. at 2 (July 30, 1992), *citing* Joliet Sand & Gravel Co. v. IPCB, 163 Ill. App. 3d 830, 837 (3d Dist. 1987).

³ Clayton Chem. Acquisition, L.L.C. v. IEPA, PCB 98-113, slip op. at 3 (Mar. 1, 2001), *citing* Outboard Marine Corp. v. Liberty Mut. Ins. Co., 154 Ill. 2d 90 (1992).

2. NACME is entitled to Summary Judgment as a Matter of Law

A. The Board's Construction of the Coating Rule Requires Summary Judgment in NACME's Favor

In its Order the Board states the relevant rules for construing regulatory language:

“The legal dispute principally concerns how to interpret the definition of “prime coat operation” in Subpart TT. 40 C.F.R. § 60.461(a) (2014). Essentially, if NACME's operation is a prime coat operation, then the permit provisions implementing Subpart TT's requirements are necessary to accomplish the purposes of the Act.

Thus, the Board must determine how to construe Subpart TT's language. The Board can follow the rules for constructing statutes when constructing regulations: “Because administrative regulations have the force and effect of law, the familiar rules that govern construction of statutes also apply to the construction of administrative regulations.” Kean v. Wal-Mart Stores, Inc., 235 Ill.2d 351, 368 (2009). The “fundamental principle” for statutory construction “is to ascertain and give effect to the legislature's intent.” Town & Country Utilities, Inc. v. IPCB, 225 Ill.2d 103, 117 (2007). And the best way to give effect to intent is to construe the specific language, which is “the most reliable indicator of the legislature's objectives in enacting a particular law.” *Id.*

Likewise, when constructing a regulation, the Board looks first to its plain language. As explained below, the Board finds that the plain language of Subpart TT indicates the regulator did not intend to apply Subpart TT to a facility that does not dry or cure coatings.” (Order at 3-4)

Using these rules of construction, the Board first looked to the provision titled “Applicability and designation of affected facility, 40 C.F.R. § 60.460(a)”. (Order at 4) The Board noted “that Subpart TT's provisions apply to specific affected facilities “in a metal coil surface coating operation.” *Id.* If NACME's operation is not a metal coil surface coating operation, then the provisions do not apply. Subpart TT's definitions section states that the term “metal coil surface coating operation” means “the application system used to apply an organic coating to the surface of any continuous metal strip that is packaged in a roll or coil.” *Id.* at §

60.461(a). The oils NACME uses are organic coatings and NACME applies them to a metal strip packaged in a coil. R. at 387-388. As such, the Board concluded that NACME's operation is a metal coil surface coating operation as defined in Subpart TT. (Order at 4)

However, the Board then further construed the Rule and concluded it has no application to NACME:

"Definition of Finish Coat Operation. The next question is whether NACME's operation meets the definition of any of the specified affected facilities. Subpart TT applies to three kinds of affected facilities, but IEPA only argues that NACME's operation is a finish coat operation. Mot. for S.J. at 12. If NACME's operation is a finish coat operation as defined in Subpart TT, its regulatory provisions apply and the permit conditions stand.

Subpart TT states:

"Finish coat operation means the coating application station, curing oven, and quench station used to apply and dry or cure the initial coating(s) on the surface of the metal coil. ..." 40 C.F.R. § 60.461(a).

(Order at 4)

We only need to parse the latter part of the definition to conclude that the regulation does not apply to NACME's facility. (Order at 5; emphasis supplied)

The components of a prime coat operation must be used to apply and dry or cure coatings. This is clear when examining the definition sentence, which states that the individual components ("the coating application station, curing oven, and quench station") are "used" specifically "to apply and dry or cure..." As NACME notes, "the definition of 'finish coat operation' requires that *some* drying or curing of the initial applied coating is necessary, and because NACME does no such drying or curing, the definition does not apply to NACME's facility." Resp. Br. at 5 (emphasis original).

This part of the definition is not trivial: a "statute should be construed, if possible, so that no word is rendered meaningless or superfluous." Kean, 235 Ill. 2d at 368. Drying and curing is an essential part of the definition of the facility. If no component is used to dry and cure, the operation is not an affected facility.

When customers ask NACME to coat the pickled steel coils with oil, the coils are delivered still wet. R. at 97-104. Subpart TT applies only to a finish

coat operation that dries or cures the coating. Because NACME does not dry or cure the coating, Subpart TT's provisions do not apply..." (Order at 5)

B. Other Authority Supports the Board's Conclusions

As stated by the Board in its Order:

"The Board relies on unambiguous language to find Subpart TT does not apply to NACME's operation. Illinois courts have stated that "where the language is clear and unambiguous, we must apply the statute [and, thus, regulation] without resort to further aids of statutory construction." Town & Country, 225 Ill. 2d at 117. The parties have provided persuasive authority to aid construction, but the Board can apply the regulation without it.

Nonetheless, if determinations by other environmental agencies starkly contrasted with the Board's interpretation, some explanation would be appropriate. However, the persuasive authority does not contradict the Board's interpretation of Subpart TT. . . .(Order at 5)

IDEM Determinations. NACME provided three determinations made by the Indiana Department of Environmental Management. The determinations declined to apply Subpart TT to metal processing operations that apply oils similar to those NACME uses, finding in each case that the regulations are inapplicable because the operations do not use a curing oven or quench station.⁴ These determinations are consistent with the Board's reading of Subpart TT. There is no drying or curing at the facilities in the IDEM determinations, so the regulation does not apply.

USEPA Background Information Document. NACME also presented a background information document written by USEPA in connection with a National Emission Standards for Hazardous Air Pollutants rulemaking applicable to metal coil coaters (excerpt at the end of Exh. D). [Appended as Exh. C] It describes coating, oven drying, and quenching practices without discussing coating operations without curing ovens. It also lists several types of coating used, but does not mention rust preventative or lubricating oil. Nothing in this document contradicts the Board's interpretation of Subpart TT. " (Order at 6)

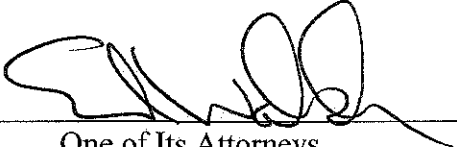
⁴ The Indiana determinations are presented as an attachment to a June 14, 2012 letter from NACME's environmental consultant to IEPA, Exhibit D to NACME's petition, appended hereto as Exh. C

CONCLUSION

NACME is entitled to judgment as a matter of law because as the Board has previously concluded NACME does not dry or cure an oil coating applied to its steel and, thus, that the Standards of Performance for Metal Coil Surface Coating pursuant to 40 CFR 60 Subpart TT have no applicability to NACME. As such NACME requests that the Board enter summary judgment in its favor and strike special conditions 2a and 2b from the FESOP or otherwise direct the IEPA to re-issue the FESOP without these special conditions.

Respectfully submitted,

NACME STEEL PROCESSING, L.L.C.,
Petitioner

By:  _____
One of Its Attorneys

October 21, 2015

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THE ILLINOIS POLLUTION CONTROL BOARD

NACME Steel Processing, L.L.C.,)	
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<i>Petitioner,</i>)	
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PROTECTION AGENCY,)	
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<i>Respondent.</i>)	

CERTIFICATE OF SERVICE

I, the undersigned certify that on this 21st day of October, 2015 I served true and correct copies of **NACME STEEL PROCESSING LLC'S MOTION FOR SUMMARY JUDGMENT** upon the persons and by the methods as follows:

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EXHIBIT A

ILLINOIS POLLUTION CONTROL BOARD

October 1, 2015

NACME STEEL PROCESSING, L.L.C.,)	
)	
Petitioner,)	
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v.)	PCB 15-153
)	(Permit Appeal – Air)
ILLINOIS ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

ORDER OF THE BOARD (by G.M. Keenan):

NACME Steel Processing, L.L.C. has appealed conditions imposed in an air permit issued by the Illinois Environmental Protection Agency (IEPA). In turn, IEPA filed the record of its permitting determination and a motion for summary judgment. This Board order denies IEPA's motion. The order proceeds as follows: introduction, legal background, procedural history, undisputed facts, discussion, and conclusion.

INTRODUCTION

NACME owns and operates a steel pickling facility at 429 West 127th Street in Chicago. Generally, pickling removes impurities such as rust or stains from the surface of metal. NACME, in particular, pickles coils of thin, flat steel to remove oxide scale. Some customers ask NACME to coat the pickled steel with rust preventative oil or lubrication oil. In these cases, NACME applies the appropriate oil, winds the steel into a coil, and ships the coil while still wet with oil.

IEPA issued an operating permit to NACME containing conditions requiring compliance with the New Source Performance Standards (NSPS) for metal coil surface coating operations, found at 40 C.F.R. Part 60, Subpart TT. Subpart TT regulates metal coil surface coating operations because the process emits volatile organic compounds in many instances. NACME and IEPA dispute whether Subpart TT's requirements apply to NACME's steel coil coating operation. Subpart TT applies to "affected facilities in a metal coil surface coating operation." 40 C.F.R. § 60.460(a) (2014). These affected facilities include "each finish coat operation." *Id.* The dispute centers on whether coating steel coils with rust preventative or lubrication oil fits Subpart TT's definition of finish coat operation.

This Board order finds that the NACME's coating operation does not meet Subpart TT's definition of finish coat operation and therefore denies IEPA's motion for summary judgment. Because NACME did not move for summary judgment, whether NACME is entitled to judgment as a matter of law is not before the Board. However, today's order does not preclude NACME from moving for summary judgment in the future.

LEGAL BACKGROUND

Section 111 of the federal Clean Air Act authorizes the U.S. Environmental Protection Agency (USEPA) to develop NSPS rules for specific categories of emission sources. 42 U.S.C. § 7411 (2014). Subpart TT contains the NSPS rules for metal coil surface coating operations. USEPA delegated administration of NSPS, including Subpart TT, to IEPA. The Illinois Environmental Protection Act (referred to here as the Act) authorizes IEPA to issue state operating permits containing federally enforceable provisions, including provisions to enforce Subpart TT. 415 ILCS 5/39.5 (2014). NACME's operating permit with Subpart TT conditions is this kind of permit.

A permit containing conditions may be appealed. 415 ILCS 5/40(a)(1) (2014). In a permit appeal, the Board must determine whether the disputed conditions are necessary to accomplish the purposes of the Act.¹ Section 9.1(b) of the Act states that its provisions are intended to be consistent with the federal Clean Air Act, which includes the NSPS program. So the Board must determine whether IEPA appropriately included Subpart TT requirements in the NACME's operating permit.

IEPA moved for summary judgment. The Board grants summary judgment when the record demonstrates that there is no issue of material fact and the moving party is entitled to judgment as a matter of law.² Below, the Board finds that there is no issue of material fact but that IEPA is not entitled to judgment as a matter of law.

PROCEDURAL HISTORY

NACME petitioned for hearing on Jan. 26, 2015 (Pet.), which the Board accepted on Feb. 5, 2015. IEPA filed the administrative record (R.) on Mar. 10, 2015 after being granted a motion to extend the time allotted for filing. IEPA then moved for summary judgment (Mot. for S.J.) on May 4, 2015. NACME responded (Resp. Br.) on July 8, 2015. IEPA replied (Reply Br.) on July 31, 2015. With leave of the Board, NACME filed a sur-reply (Sur-Reply Br.) on Aug. 11, 2015.

UNDISPUTED FACTS

The parties do not dispute the facts pertaining to NACME's production process. At its facility, NACME pickles steel to remove oxide scale. R. at 252, 712. After pickling, NACME often applies rust preventative oil or lubrication oil to the steel. *Id.* The steel coils are transferred to the customer while coated in the oil and the customer removes the oil before use. R. at 97-104. There is no curing or quenching equipment at NACME's facility and the steel coils are not dried before shipment. R. at 119-125.

¹ Sherex Chem. Co. v. IEPA, PCB 91-202, slip op. at 2 (July 30, 1992), *citing* Joliet Sand & Gravel Co. v. IPCB, 163 Ill. App. 3d 830, 837 (3d Dist. 1987).

² Clayton Chem. Acquisition, L.L.C. v. IEPA, PCB 98-113, slip op. at 3 (Mar. 1, 2001), *citing* Outboard Marine Corp. v. Liberty Mut. Ins. Co., 154 Ill. 2d 90 (1992).

Nor do the parties dispute the facts pertaining to the permitting process. In October 2005, NACME applied to IEPA for a permit to operate its facility. Nearly seven years later, on April 26, 2012, IEPA issued a draft operating permit. The draft permit's conditions required compliance with Subpart TT. NACME asked IEPA to remove these requirements from the draft permit shortly after it was issued.³ It also attempted to appeal the draft permit in August 2012, but the Board ordered NACME to wait for the final permit before appealing.⁴ IEPA issued the final operating permit on December 22, 2014. Exh. A to Pet. It contained the same Subpart TT requirements as the draft permit, so NACME petitioned the Board again. This time, because NACME appealed a final permit, the Board accepted the petition for hearing.

DISCUSSION

Issue of Material Fact

IEPA argues that there is no issue of material fact. Mot. for S.J. at 4-6; Reply Br. at 2. And NACME does not argue to the contrary, instead only taking issue with IEPA's legal arguments.⁵ The Board agrees that there is no issue of material fact in the record and turns to whether, on those facts, IEPA is entitled to judgment as a matter of law.

Judgment as a Matter of Law

Construing Regulatory Language

The legal dispute principally concerns how to interpret the definition of "prime coat operation" in Subpart TT. 40 C.F.R. § 60.461(a) (2014). Essentially, if NACME's operation is a prime coat operation, then the permit provisions implementing Subpart TT's requirements are necessary to accomplish the purposes of the Act.

Thus, the Board must determine how to construe Subpart TT's language. The Board can follow the rules for constructing statutes when constructing regulations: "Because administrative regulations have the force and effect of law, the familiar rules that govern construction of statutes also apply to the construction of administrative regulations." Kean v. Wal-Mart Stores, Inc., 235 Ill.2d 351, 368 (2009). The "fundamental principle" for statutory construction "is to ascertain and give effect to the legislature's intent." Town & Country Utilities, Inc. v. IPCB, 225 Ill.2d 103, 117 (2007). And the best way to give effect to intent is to construe the specific language, which is "the most reliable indicator of the legislature's objectives in enacting a particular law." *Id.*

³ NACME and IEPA corresponded about the permit before NACME began this appeal. For example, NACME emailed IEPA on June 27, 2012 and raised many of the arguments that NACME raised again in its petition. Exh. F to Pet.

⁴ NACME Steel Processing, L.L.C. v. IEPA, PCB 13-7 (Nov. 15, 2012).

⁵ For instance, NACME's response only attacks IEPA's interpretation of Subpart TT and use of persuasive authority. Resp. Br. at 3-9.

Likewise, when constructing a regulation, the Board looks first to its plain language. As explained below, the Board finds that the plain language of Subpart TT indicates the regulator did not intend to apply Subpart TT to a facility that does not dry or cure coatings.

Definition of Metal Coil Surface Coating Operation. First, we look to the provision titled “Applicability and designation of affected facility,” 40 C.F.R. § 60.460(a).⁶ It states that Subpart TT’s provisions apply to specific affected facilities “in a metal coil surface coating operation.” *Id.* If NACME’s operation is not a metal coil surface coating operation, then the provisions do not apply. Subpart TT’s definitions section states that the term “metal coil surface coating operation” means “the application system used to apply an organic coating to the surface of any continuous metal strip...that is packaged in a roll or coil.” *Id.* at § 60.461(a). The oils NACME uses are organic coatings and NACME applies them to a metal strip packaged in a coil. R. at 387-388. So NACME’s operation is a metal coil surface coating operation as defined in Subpart TT.

Definition of Finish Coat Operation. The next question is whether NACME’s operation meets the definition of any of the specified affected facilities. Subpart TT applies to three kinds of affected facilities, but IEPA only argues that NACME’s operation is a finish coat operation. Mot. for S.J. at 12. If NACME’s operation is a finish coat operation as defined in Subpart TT, its regulatory provisions apply and the permit conditions stand.

Subpart TT states:

“*Finish coat operation* means the coating application station, curing oven, and quench station used to apply and dry or cure the initial coating(s) on the surface of the metal coil. ...” 40 C.F.R. § 60.461(a).

NACME argued that that the definition “unambiguously states that a finish coat operation involves *three* physical attributes: a coating application station, curing oven, *and* quench station. The use of the conjunction ‘and’ leaves no doubt about this interpretation” and if only one attribute were required, the regulation would have used the word “or” instead of “and.” Resp. Br. at 5 (emphasis original).

IEPA argued that because the definition does not state that an operation “shall” have all the components listed, then not all three are necessary for Subpart TT to apply.⁷ In its reply, IEPA also argued that the language of the regulation is ambiguous. Reply Br. at 4-6.

⁶ Neither party addresses the relevance, if any, in the distinction between a stationary source (here, the metal coil surface coating operation) and an affected facility (here, the finish coat operation) outlined in the general provisions to the NSPS regulations, 40 C.F.R. §§ 60.1 *et seq.*

⁷ Mot. for S.J. at 12-13. IEPA also argues that because the definition notes the finish coat operation can be used to “apply and dry *or* cure,” implying that a curing oven may not be at a facility covered by Subpart TT. *Id.* (emphasis original). However, the definition of “curing oven” itself states that the curing oven may be used to “dry or cure.” 40 C.F.R. § 60.461(a). Thus, IEPA’s interpretation is clearly wrong.

But the Board need not address whether all three physical attributes listed in Subpart TT are required to constitute a finish coat operation. Instead, we only need to parse the latter part of the definition to conclude that the regulation does not apply to NACME's facility.

The components of a prime coat operation must be used to apply and dry or cure coatings. This is clear when examining the definition sentence, which states that the individual components ("the coating application station, curing oven, and quench station") are "used" specifically "to apply and dry or cure..." As NACME notes, "the definition of 'finish coat operation' requires that *some* drying or curing of the initial applied coating is necessary, and because NACME does no such drying or curing, the definition does not apply to NACME's facility." Resp. Br. at 5 (emphasis original).

This part of the definition is not trivial: a "statute should be construed, if possible, so that no word is rendered meaningless or superfluous." Kean, 235 Ill. 2d at 368. Drying and curing is an essential part of the definition of the facility. If no component is used to dry and cure, the operation is not an affected facility.

When customers ask NACME to coat the pickled steel coils with oil, the coils are delivered still wet. R. at 97-104. Subpart TT applies only to a finish coat operation that dries or cures the coating. Because NACME does not dry or cure the coating, Subpart TT's provisions do not apply. To reach this result, the Board does not address whether a curing oven must be present to constitute a finish coat operation.

Persuasive Authority

The Board relies on unambiguous language to find Subpart TT does not apply to NACME's operation. Illinois courts have stated that "where the language is clear and unambiguous, we must apply the statute [and, thus, regulation] without resort to further aids of statutory construction." Town & Country, 225 Ill. 2d at 117. The parties have provided persuasive authority to aid construction, but the Board can apply the regulation without it.

Nonetheless, if determinations by other environmental agencies starkly contrasted with the Board's interpretation, some explanation would be appropriate. However, the persuasive authority does not contradict the Board's interpretation of Subpart TT.

USEPA Region 5 Determination. IEPA cites an applicability determination from USEPA's Region 5 office in support of its interpretation of Subpart TT. Exh. E to Pet. In this determination, USEPA applied a performance testing provision in Subpart TT to a coating facility without a curing oven operated by a company named Olin. IEPA argued that this shows USEPA "determined that the subject facility met the applicability standard of...Subpart TT," thwarting NACME's argument that Subpart TT only applies to facilities with a curing oven. Mot. for S.J. at 13-14.

NACME argues that the determination has no bearing because it "focuses on an entirely unrelated issue, the alleged failure to appropriately measure VOC emissions from a plant in

conducting performances tests.” Resp. Br. at 7. However, applicability is not entirely unrelated to performance testing. USEPA deliberately required compliance with Subpart TT at a facility lacking a curing oven and it is not plausible to argue USEPA simply ignored applicability.

Yet, Olin’s operation is distinguishable from NACME’s in a manner consistent with the Board’s interpretation of Subpart TT. Olin applied and dried a coating through evaporation. In fact, Olin operated a carbon filter as part of the coating applicator to control the emissions generated when the coating dried. Exh. E at 2. The application station is used to dry, thus it meets the definition in Subpart TT. By contrast, NACME does not dry the coating; the coils are shipped still wet with oil. Resp. Br. at 2.

3M Determination. IEPA also cites an August 9, 2013 USEPA applicability determination analyzing a facility where a print station applied ink to steel coils and was subject to Subpart TT.⁸ IEPA says that this determination should persuade the Board because the print station lacked a curing oven, yet USEPA determined that Subpart TT applied.

But IEPA’s characterization is inaccurate: the print station included an oven. The determination notes that the operation includes “a print station with a small oven for making product markings.” *3M Determinations* at II, *supra* at n. 8. Thus the determination does not conflict with the Board’s interpretation of Subpart TT because the equipment is used to dry the ink.

IDEM Determinations. NACME provided three determinations made by the Indiana Department of Environmental Management. The determinations declined to apply Subpart TT to metal processing operations that apply oils similar to those NACME uses, finding in each case that the regulations are inapplicable because the operations do not use a curing oven or quench station.⁹ These determinations are consistent with the Board’s reading of Subpart TT. There is no drying or curing at the facilities in the IDEM determinations, so the regulation does not apply.

USEPA Background Information Document. NACME also presented a background information document written by USEPA in connection with a National Emission Standards for Hazardous Air Pollutants rulemaking applicable to metal coil coaters (excerpt at the end of Exh. D). It describes coating, oven drying, and quenching practices without discussing coating operations without curing ovens. It also lists several types of coating used, but does not mention rust preventative or lubricating oil. Nothing in this document contradicts the Board’s interpretation of Subpart TT.

Other Arguments

⁸ Reply Br. at 5, citing *Response to 3M Request for Several MACT/NSPS Applicability Determinations*, USEPA (Aug. 9, 2013), available at <http://cfpub.epa.gov/adi/pdf/adi-nsps-1400018.pdf>.

⁹ The Indiana determinations are presented as an attachment to a June 14, 2012 letter from NACME’s environmental consultant to IEPA, Exhibit D to the petition.

IEPA contended that NACME's construction permit application attested that Subpart TT applied to its operation. Mot. for S.J. at 14-15. However, NACME notes that it contested the special conditions in its permits less than a month after NACME received its first draft operating permit. Resp. Br. at 9. Regardless, IEPA does not explain whether this purported admission should outweigh the plain language of Subpart TT, inform the interpretation of Subpart TT, or otherwise alter the Board's analysis based in parsing the words of the regulation. The Board sees no reason to do so and thus accords this argument no weight.

IEPA's motion also responds to an argument NACME made in its petition about the solid content of the oil applied to the steel coils. Mot. for S.J. at 18. NACME argued that compliance with Subpart TT is measured in terms of pounds of volatile organic matter per pounds of solids. There are no solids in NACME's oil, thus Subpart TT does not apply. Pet. at 5. However, as IEPA notes, determining compliance with a regulation is distinct from determining applicability. Mot. for S.J. at 18. So this argument plays no role in the Board's finding on the applicability of Subpart TT.

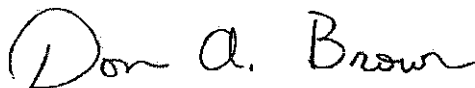
IEPA also moved to strike Exhibit A to NACME's response brief, the Affidavit of John DuBrock. Reply Br. at 2-4. The Board grants this motion. But in NACME's sur-reply, it properly notes that the affidavit largely reiterates alleged facts already found in the record. Sur-Reply Br. at 4.

CONCLUSION

The Board denies IEPA's motion for summary judgment. Though the Board finds no issue of material fact, IEPA has not shown it is entitled to judgment as a matter of law. Because NACME made no motion for summary judgment, whether NACME is entitled to judgment as a matter of law is not a question before the Board. However, today's order does not preclude NACME from moving for summary judgment in the future. Absent such a motion, the Board directs the parties to proceed to hearing, as outlined in the Board's February 5, 2015 order.¹⁰

IT IS SO ORDERED.

I, Don A. Brown, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on October 1, 2015, by a vote of 5-0.



Don A. Brown, Assistant Clerk
Illinois Pollution Control Board

¹⁰ NACME Steel Processing, L.L.C. v. IEPA, PCB 15-153 (Feb. 5, 2015).

EXHIBIT B



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217/785-1705

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- NSPS SOURCE

PERMITTEE

NACME Steel Processing, LLC
Attn: John DuBrock
429 West 127th Street
Chicago, Illinois 60628

Application No.: 05100052

I.D. No.: 031600FWL

Applicant's Designation:

Date Received: October 25, 2005

Subject: Steel Pickling Line Modification

Date Issued: December 22, 2014

Expiration Date: December 22, 2024

Location: 429 West 127th Street, Chicago, Cook County 60628

This Permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of one (1) steel coil pickling line comprised of four (4) pickling tanks and coil washer exhausted to turbo-tunnel enclosure and three (3) 14,000 gallon hydrochloric acid storage tanks all controlled by a scrubber and one (1) steel coil oil coater pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
 - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 10 tons/year for any single Hazardous Air Pollutants (HAP), and 25 tons/year for any combination of such HAPs). As a result, the source is excluded from the requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit are described in Attachment A.
 - ii. To establish federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP) and 25 tons/year of any combination of such HAPs so that the source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants, 40 CFR 63 Subpart CCC and the NESHAP for Surface Coating of Metal Coil, 40 CFR Part 63, Subpart SSSS.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permit(s) for this location.

- 2a. The coil coater associated with the steel coil pickling line is subject to the New Source Performance Standards (NSPS) for Metal Coil Surface Coating, 40 CFR 60 Subparts A and TT. The Illinois EPA is administering the NSPS in Illinois on behalf of the United States EPA under a delegation agreement. Pursuant to 40 CFR 60.460(a) and (b), the provisions of 40 CFR 60 Subpart TT apply to the following affected facilities in a metal coil surface coating operation: each prime coat operation, each finish coat operation, and each prime and finish coat operation combined when the finish coat is applied wet on wet over the prime coat and both coatings are cured simultaneously that commences construction, modification, or reconstruction after January 5, 1981.
- b. Pursuant to 40 CFR 60.462(a)(1), on and after the date on which 40 CFR 60.8 requires a performance test to be completed, each owner or operator subject to 40 CFR 60 Subpart TT shall not cause to be discharged into the atmosphere more than 0.28 kilogram VOC per liter (kg VOC/l) of coating solids applied for each calendar month for each affected facility that does not use an emission control device(s).
- 3a. Pursuant to 35 Ill. Adm. Code 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 units subject to 35 Ill. Adm. Code 212.122.
- b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meter (1000 foot) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.
- c. Pursuant to 35 Ill. Adm. Code 212.301, 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 toward the zenith at a point beyond the property line of the source.
- d. Pursuant to 35 Ill. Adm. Code 212.316(c), no person shall cause or allow fugitive particulate matter emissions from any roadway or parking area to exceed an opacity of 10 percent, except that the opacity shall not exceed 5 percent at quarries with a capacity to produce more than 1 million tons/year of aggregate.
- e. Pursuant to 35 Ill. Adm. Code 212.316(f), unless an emission unit has been assigned a particulate matter, PM_{10} , or fugitive particulate matter emissions limitation elsewhere in this 35 Ill. Adm. Code 212.316 or in 35 Ill. Adm. Code 212 Subparts R or S, no person shall cause or allow

fugitive particulate matter emissions from any emission unit to exceed an opacity of 20 percent.

- f. Pursuant to 35 Ill. Adm. Code 212.321(a), except as further provided in 35 Ill. Adm. Code Part 212, no person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in 35 Ill. Adm. Code 212.321(c).
- g. Pursuant to 35 Ill. Adm. Code 212.324(b), except as otherwise provided in 35 Ill. Adm. Code 212.324, no person shall cause or allow the emission into the atmosphere, of PM₁₀, from any process emission unit to exceed 68.7 mg/scm (0.03 gr/scf) during any one hour period.
- 4a. Pursuant to 35 Ill. Adm. Code 218.204(d), except as provided in 35 Ill. Adm. Code 218.205, 218.207, 218.208, 218.212, 218.215 and 218.216, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for Coil Coating. Except as otherwise provided in 35 Ill. Adm. Code 218.204(a), (c), (g), (h), (j), (l), (n), (p), and (q), compliance with the emission limitations is required on and after March 15, 1996. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with 35 Ill. Adm. Code 218 Subpart F must be demonstrated through the applicable coating analysis test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(c) except where noted. The emission limitations are as follows:

Coil Coating	kg/l	lb/gal
	0.20	(1.7)

- b. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall only apply to photochemically reactive material.
- 5a. This permit is issued based on the steel coil pickling line at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Steel Pickling - HCl Process Facilities and Hydrochloric Acid Regeneration Plants, 40 CFR 63 Subpart

CCC. This is a result of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs.

- b. This permit is issued based on coil coater associated with the existing steel coil pickling line at this source not being subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Surface Coating of Metal Coil, 40 CFR Part 63, Subpart SSSS. This is a result of the federally enforceable production and operating limitations, which restrict the potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs.

- 6a. Pursuant to 35 Ill. Adm. Code 212.314, 35 Ill. Adm. Code 212.301 shall not apply and spraying pursuant to 35 Ill. Adm. Code 212.304 through 212.310 and 35 Ill. Adm. Code 212.312 shall not be required when the wind speed is greater than 40.2 km/hr (25 mph). Determination of wind speed for the purposes of this rule shall be by a one-hour average or hourly recorded value at the nearest official station of the U.S. Weather Bureau or by wind speed instruments operated on the site. In cases where the duration of operations subject to this rule is less than one hour, wind speed may be averaged over the duration of the operations on the basis of on-site wind speed instrument measurements.

- b. Pursuant to 35 Ill. Adm. Code 212.324(d), the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c) shall not apply to those emission units with no visible emissions other than fugitive particulate matter; however, if a stack test is performed, 35 Ill. Adm. Code 212.324(d) is not a defense finding of a violation of the mass emission limits contained in 35 Ill. Adm. Code 212.324(b) and (c).

- 7a. This permit is issued based on the solvent cleaning operations at this source not being subject to the requirements of 35 Ill. Adm. Code 218.187(b). Pursuant to 35 Ill. Adm. Code 218.187(a)(1), on and after January 1, 2012: Except as provided in 35 Ill. Adm. Code 218.187(a)(2), the requirements of 35 Ill. Adm. Code 218.187 shall apply to all cleaning operations that use organic materials at sources that emit a total of 226.8 kg per calendar month (500 lbs per calendar month) or more of VOM, in the absence of air pollution control equipment, from cleaning operations at the source other than cleaning operations identified in 35 Ill. Adm. Code 218.187(a)(2). For purposes of 35 Ill. Adm. Code 218.187, "cleaning operation" means the process of cleaning products, product components, tools, equipment, or general work areas during production, repair, maintenance, or servicing, including but not limited to spray gun cleaning, spray booth cleaning, large and small manufactured components cleaning, parts cleaning, equipment cleaning, line cleaning, floor cleaning, and tank cleaning, at sources with emission units;

- b. Pursuant to 35 Ill. Adm. Code 218.209, no owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 is

required to meet the limitations of 35 Ill. Adm. Code 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302), after the date by which the coating line is required to meet 35 Ill. Adm. Code 218.204.

8. Pursuant to 40 CFR 60.11(d), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Illinois EPA or USEPA which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
- 9a. Pursuant to 35 Ill. Adm. Code 212.306, all normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312. 7
- b. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 and 35 Ill. Adm. Code 212.316 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.
- c. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:
 - i. The name and address of the source;
 - ii. The name and address of the owner or operator responsible for execution of the operating program;
 - iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
 - iv. Location of unloading and transporting operations with pollution control equipment;
 - v. A detailed description of the best management practices utilized to achieve compliance with 35 Ill. Adm. Code 212 Subpart K, including an engineering specification of particulate collection

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equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;

- vi. Estimated frequency of application of dust suppressants by location of materials; and
 - vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program.
- d. Pursuant to 35 Ill. Adm. Code 212.312, the operating program shall be amended from time to time by the owner or operator so that the operating program is current. Such amendments shall be consistent with 35 Ill. Adm. Code 212 Subpart K and shall be submitted to the Illinois EPA for its review.
- e. Pursuant to 35 Ill. Adm. Code 212.324(f), for any process emission unit subject to 35 Ill. Adm. Code 212.324(a), the owner or operator shall maintain and repair all air pollution control equipment in a manner that assures that the emission limits and standards in 35 Ill. Adm. Code 212.324 shall be met at all times. 35 Ill. Adm. Code 212.324 shall not affect the applicability of 35 Ill. Adm. Code 201.149. Proper maintenance shall include the following minimum requirements:
- i. Visual inspections of air pollution control equipment;
 - ii. Maintenance of an adequate inventory of spare parts; and
 - iii. Expedient repairs, unless the emission unit is shutdown.
- 10a. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- b. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the scrubber and turbo-tunnel enclosure such that scrubber and turbo-tunnel enclosure are kept in proper working condition and not cause a violation the Environmental Protection Act or regulations promulgated therein.
- c. The scrubber and turbo-tunnel enclosure shall be in operation at all times when the associated emission units are in operation and emitting air contaminants.
- d. The scrubber shall be equipped with a monitoring device that continuously indicates and records the make-up water flow and pressure drop across the scrubber. The Permittee shall calibrate, maintain, and operate the scrubber monitoring device according to the manufacturer's specifications.

11a. This permit is issued based on negligible emissions of hydrogen chloride (HCl) from the steel coil pickling line and three hydrochloric acid storage tanks. For this purpose, HCl emission shall not exceed nominal emission rates of 0.1 lb/hour and 0.44 ton/year. These limits are based on the maximum production rate, the most recent stack test data and the following operational limits:

- i. Steel Coil Throughput: 120 tons/hour, 89,000 tons/month, 1,050,000 tons/year;
- ii. Hydrochloric Acid Usage: 2,510 lbs/hour, 930 tons/month, 11,000 tons/year;
- iii. Maximum HCl concentration in pickling tanks: 16%;
- iv. Maximum pickling tanks temperature: 190°F;
- v. Scrubber make-up water flow no less than 1.88 gallons/minute; and
- vi. Pressure drop across the scrubber no more than 9.15" w.c.

b. The VOM usage and VOM emission from the oil coater shall not exceed the following limits:

VOM Usage		VOM Emissions	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
1.27	12.70	1.27	12.70

These limits are based on the maximum material usage, the maximum VOM and HAP content of the materials, and the maximum emissions determined by a material balance. The VOM and HAP emissions shall be determined from the following equation:

$$E = \sum (V_i \times C_i),$$

Where:

E = VOM or HAP emissions (tons);

V_i = individual coating usage (tons); and

C_i = VOM or HAP content of the each individual coating (weight fraction).

c. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act from the source shall not exceed 0.79 tons/month and 7.9 tons/year of any single HAP and 1.31 tons/month and 13.14 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirements to obtain a CAAPP permit from the Illinois EPA, the NESHAP for Steel Pickling - HCl Process

Facilities and Hydrochloric Acid Regeneration Plants, 40 CFR 63 Subpart CCC, and the NESHAP for Surface Coating of Metal Coil, 40 CFR Part 63, Subpart SSSS.

- d. Compliance with the annual limits of this permit shall be determined on a monthly basis from the sum of the data for the current month plus the preceding 11 months (running 12 month total).
- 12a. Pursuant to 40 CFR 60.8(a), at such other times as may be required by the Illinois EPA or USEPA under section 114 of the Clean Air Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Illinois EPA or USEPA a written report of the results of such performance test(s).
- b. Pursuant to 40 CFR 60.8(b), performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart of 40 CFR Part 60 unless the Illinois EPA or USEPA:
 - i. Specifies or approves, in specific cases, the use of a reference method with minor changes in methodology;
 - ii. Approves the use of an equivalent method;
 - iii. Approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance;
 - iv. Waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Illinois EPA's or USEPA's satisfaction that the affected facility is in compliance with the standard; or
 - v. Approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Illinois EPA's or USEPA's authority to require testing under section 114 of the Clean Air Act.
 - c. Pursuant to 40 CFR 60.8(c), performance tests shall be conducted under such conditions as the Illinois EPA or USEPA shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Illinois EPA or USEPA such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

- d. Pursuant to 40 CFR 60.8(e), the owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:
 - i. Sampling ports adequate for test methods applicable to such facility. This includes:
 - A. Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and
 - B. Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.
 - ii. Safe sampling platform(s).
 - iii. Safe access to sampling platform(s).
 - iv. Utilities for sampling and testing equipment.
- 13a. Pursuant to 40 CFR 60.463(b), the owner or operator of an affected facility shall conduct an initial performance test as required under 40 CFR 60.8(a) and thereafter a performance test for each calendar month for each affected facility according to the procedures in 40 CFR 60.463.
- b. Pursuant to 40 CFR 60.463(c)(1), the owner or operator shall use the following procedures for determining monthly volume-weighted average emissions of VOC's in kg/l of coating solids applied. An owner or operator shall use the following procedures for each affected facility that does not use a capture system and control device to comply with the emission limit specified under 40 CFR 60.462(a)(1). The owner or operator shall determine the composition of the coatings by formulation data supplied by the manufacturer of the coating or by an analysis of each coating, as received, using Method 24. The Illinois EPA or USEPA may require the owner or operator who uses formulation data supplied by the manufacturer of the coatings to determine the VOC content of coatings using Method 24 or an equivalent or alternative method. The owner or operator shall determine the volume of coating and the mass of VOC-solvent added to coatings from company records on a monthly basis. If a common coating distribution system serves more than one affected facility or serves both affected and existing facilities, the owner or operator shall estimate the volume of coating used at each affected facility by using the average dry weight of coating and the surface area coated by each affected and existing facility or by other procedures acceptable to the Illinois EPA or USEPA.
 - i. Calculate the volume-weighted average of the total mass of VOC's consumed per unit volume of coating solids applied during each calendar month for each affected facility, except as provided

under 40 CFR 60.463(c)(1)(iv). The weighted average of the total mass of VOC's used per unit volume of coating solids applied each calendar month is determined by the following procedures.

- A. Calculate the mass of VOC's used ($M_o + M_d$) during each calendar month for each affected facility by using Equation 1 in 40 CFR 60.463(c)(1)(i)(A).

$$M_o + M_d = \sum_{i=1}^n L_{ci} D_{ci} W_{oi} + \sum_{j=1}^m L_{dj} D_{dj} \quad \text{Equation 1}$$

($SL_{dj} D_{dj}$ will be 0 if no VOC solvent is added to the coatings, as received)

Where:

n is the number of different coatings used during the calendar month, and

m is the number of different VOC solvents added to coatings used during the calendar month.

- B. Calculate the total volume of coating solids used (I_s) in each calendar month for each affected facility by the following equation:

$$I_s = \sum_{i=1}^n V_{si} I_{ci} \quad \text{Equation 2}$$

Where:

n is the number of different coatings used during the calendar month.

- C. Calculate the volume-weighted average mass of VOC's used per unit volume of coating solids applied (G) during the calendar month for each affected facility by the following equation:

$$G = \frac{M_o + M_d}{I_s} \quad \text{Equation 3}$$

- ii. Calculate the volume-weighted average of VOC emissions to the atmosphere (N) during the calendar month for each affected facility by the following equation:

$$N = G \quad \text{Equation 4}$$

- iii. Where the volume-weighted average mass of VOC's discharged to the atmosphere per unit volume of coating solids applied (N) is equal

to or less than 0.28 kg/l, the affected facility is in compliance.

- iv. If each individual coating used by an affected facility has a VOC content, as received, that is equal to or less than 0.28 kg/l of coating solids, the affected facility is in compliance provided no VOC's are added to the coatings during distribution or application.
- 14a. Pursuant to 40 CFR 60.466(a)(1), the reference methods in Appendix A to 40 CFR Part 60, except as provided under 40 CFR 60.8(b), shall be used to determine compliance with 40 CFR 60.462 as follows: Method 24, or data provided by the formulator of the coating, shall be used for determining the VOC content of each coating as applied to the surface of the metal coil. In the event of a dispute, Method 24 shall be the reference method. When VOC content of waterborne coatings, determined by Method 24, is used to determine compliance of affected facilities, the results of the Method 24 analysis shall be adjusted as described in Section 12.6 of Method 24;
- b. Pursuant to 40 CFR 60.466(b), for Method 24, the coating sample must be at least a 1-liter sample taken at a point where the sample will be representative of the coating as applied to the surface of the metal coil.
- 15a. Pursuant to 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:
- i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.
 - ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or

ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

- b. Testing required by Conditions 16 and 17 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.
16. Pursuant to 35 Ill. Adm. Code 212.110(c), upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA.
17. Pursuant to 35 Ill. Adm. Code 218.211(a), the VOM content of each coating shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 to establish the records required under 35 Ill. Adm. Code 218.211.
18. Pursuant to 40 CFR 60.464(a), where compliance with the numerical limit specified in 40 CFR 60.462(a)(1) or (2) is achieved through the use of low VOC-content coatings without the use of emission control devices or through the use of higher VOC-content coatings in conjunction with emission control devices, the owner or operator shall compute and record the average VOC content of coatings applied during each calendar month for each affected facility, according to the equations provided in 40 CFR 60.463.
- 19a. Pursuant to 40 CFR 60.7(b), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative.
- b. Pursuant to 40 CFR 60.7(f), any owner or operator subject to the provisions of 40 CFR Part 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by 40 CFR Part 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.
20. Pursuant to 40 CFR 60.465(e), each owner or operator subject to the provisions of 40 CFR 60 Subpart TT shall maintain at the source, for a period of at least 2 years, records of all data and calculations used

to determine monthly VOC emissions from each affected facility and to determine the monthly emission limit, where applicable. Where compliance is achieved through the use of thermal incineration, each owner or operator shall maintain, at the source, daily records of the incinerator combustion temperature. If catalytic incineration is used, the owner or operator shall maintain at the source daily records of the gas temperature, both upstream and downstream of the incinerator catalyst bed.

21. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.
- 22a. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.
- b. Pursuant to 35 Ill. Adm. Code 212.316(g)(1), the owner or operator of any fugitive particulate matter emission unit subject to 35 Ill. Adm. Code 212.316 shall maintain written records of the application of control measures as may be needed for compliance with the opacity limitations of 35 Ill. Adm. Code. 212.316.

- c. Pursuant to 35 Ill. Adm. Code 212.316(g)(2), the records required under 35 Ill. Adm. Code 212.316 shall include at least the following:
 - i. The name and address of the source;
 - ii. The name and address of the owner and/or operator of the source;
 - iii. A map or diagram showing the location of all emission units controlled including the location, identification, length, and width of roadways;
 - iv. For each application of water or chemical solution to roadways by truck: the name and location of the roadway controlled, application rate of each truck, frequency of each application, width of each application, identification of each truck used, total quantity of water or chemical used for each application and, for each application of chemical solution, the concentration and identity of the chemical;
 - v. 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
 - vi. A log recording incidents when control measures were not used and a statement of explanation.
- d. Pursuant to 35 Ill. Adm. Code 212.316(g)(3), copies of all records required by 35 Ill. Adm. Code 212.316 shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA and shall be transmitted to the Illinois EPA by a company-designated person with authority to release such records.
- e. Pursuant to 35 Ill. Adm. Code 212.316(g)(4), the records required under 35 Ill. Adm. Code 212.316 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- f. Pursuant to 35 Ill. Adm. Code 212.324(g)(1), written records of inventory and documentation of inspections, maintenance, and repairs of all air pollution control equipment shall be kept in accordance with 35 Ill. Adm. Code 212.324(f).
- g. Pursuant to 35 Ill. Adm. Code 212.324(g)(2), the owner or operator shall document any period during which any process emission unit was in operation when the air pollution control equipment was not in operation or was malfunctioning so as to cause an emissions level in excess of the emission limitation. These records shall include documentation of causes for pollution control equipment not operating or such malfunction and shall state what and corrective actions taken and what repairs were made.

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- h. Pursuant to 35 Ill. Adm. Code 212.324(g)(3), a written record of the inventory of all spare parts not readily available from local suppliers shall be kept an updated.
- i. Pursuant to 35 Ill. Adm. Code 212.324(g)(5), the records required under 35 Ill. Adm. Code 212.324 shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Illinois EPA representatives during working hours.
- 23a. Pursuant to 35 Ill. Adm. Code 218.187(e)(1)(B), the owner or operator of a source exempt from the limitations of 35 Ill. Adm. Code 218.187 because of the criteria in 35 Ill. Adm. Code 218.187(a)(1) shall on and after January 1, 2012, collect and record the following information each month for each cleaning operation, other than cleaning operations identified in 35 Ill. Adm. Code 218.187 (a)(2):
 - i. The name and identification of each VOM-containing cleaning solution as applied in each cleaning operation;
 - ii. The VOM content of each cleaning solution as applied in each cleaning operation;
 - iii. The weight of VOM per volume and the volume of each as-used cleaning solution; and
 - iv. The total monthly VOM emissions from cleaning operations at the source.
- b. Pursuant to 35 Ill. Adm. Code 218.187(e)(10), all records required by this 35 Ill. Adm. Code 218.187(e) shall be retained by the source for at least three years and shall be made available to the Illinois EPA upon request.
- c. Pursuant to 35 Ill. Adm. Code 218.211(c)(2), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 other than 35 Ill. Adm. Code 218.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D) and complying by means of 35 Ill. Adm. Code 218.204 shall comply with the following: On and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date, the owner or operator of a subject coating line shall collect and record all of the following information each day, unless otherwise specified, for each coating line and maintain the information at the source for a period of three years:
 - i. The name and identification number of each coating as applied on each coating line;
 - ii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.

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- 24a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
- i. Records addressing use of good operating practices for the scrubber and turbo-tunnel enclosure:
 - A. Records for periodic inspection of the scrubber and turbo-tunnel enclosure with date, individual performing the inspection, and nature of inspection; and
 - B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
 - ii. Daily HCl concentration in pickling tanks (weight %);
 - iii. Daily pickling tank temperature (°F);
 - iv. Daily scrubber make-up water flow (gallons/minute);
 - v. Daily pressure drop across the scrubber (in of w.c.);
 - vi. Steel process rate (tons/month and tons/year);
 - vii. Hydrochloric acid usage (gallons/month and gallons/year);
 - viii. Coating and cleanup solvent usage (tons/month and tons/year);
 - ix. The VOM and HAP content of each coating and cleanup solvent (% by weight);
 - x. Monthly and annual emissions of PM, VOM and HAP from the source with supporting calculations (tons/month and tons/year).
- b. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer storage device) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to the Illinois EPA or USEPA request for records during the course of a source inspection.
25. Pursuant to 40 CFR 60.465(c), following the initial performance test, the owner or operator of an affected facility shall identify, record, and submit a written report to the Illinois EPA or USEPA every calendar quarter of each instance in which the volume-weighted average of the local mass of VOC's emitted to the atmosphere per volume of applied coating solids (N) is greater than the limit specified under 40 CFR 60.462. If no such instances have occurred during a particular quarter, a report stating this shall be submitted to the Illinois EPA or USEPA semiannually.

- 26a. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
- b. Pursuant to 35 Ill. Adm. Code 212.316(g)(1), the owner or operator of any fugitive particulate matter emission unit subject to 35 Ill. Adm. Code 212.316 shall submit to the Illinois EPA an annual report containing a summary of the application of control measures as may be needed for compliance with the opacity limitations of 35 Ill. Adm. Code. 212.316.
- c. Pursuant to 35 Ill. Adm. Code 212.316(g)(5), a quarterly report shall be submitted to the Illinois EPA 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, which shall constitute a defense to the requirements of this Section. This report shall be submitted to the Illinois EPA 30 calendar days from the end of a quarter. Quarters end March 31, June 30, September 30, and December 31.
- d. Pursuant to 35 Ill. Adm. Code 212.324(g)(4), copies of all records required by 35 Ill. Adm. Code 212.324 shall be submitted to the Illinois EPA within ten (10) working days after a written request by the Illinois EPA.
- 27a. Pursuant to 35 Ill. Adm. Code 218.187(e)(1)(C), the owner or operator of a source exempt from the limitations of 35 Ill. Adm. Code 218.187 because of the criteria in 35 Ill. Adm. Code 218.187(a)(1) shall comply with the following: Notify the Illinois EPA of any record that shows that the combined emissions of VOM from cleaning operations at the source, other than cleaning operations identified in 35 Ill. Adm. Code 218.187(a)(2), ever equal or exceed 226.8 kg/month (500 lbs/month), in the absence of air pollution control equipment, within 30 days after the event occurs.
- b. Pursuant to 35 Ill. Adm. Code 218.211(c)(3), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 other than 35 Ill. Adm. Code 218.204(a)(1)(B), (a)(1)(C), (a)(2)(B), (a)(2)(C), or (a)(2)(D) and complying by means of 35 Ill. Adm. Code 218.204 shall comply with the following:
- i. By a date consistent with 35 Ill. Adm. Code 218.106, or upon initial start-up of a new coating line, or upon changing the method of compliance from an existing subject coating line from

35 Ill. Adm. Code 218.205, 35 Ill. Adm. Code 218.207, 35 Ill. Adm. Code 218.215, or 35 Ill. Adm. Code 218.216 to 35 Ill. Adm. Code 218.204; the owner or operator of a subject coating line shall certify to the Illinois EPA that the coating line will be in compliance with 35 Ill. Adm. Code 218.204 on and after a date consistent with 35 Ill. Adm. Code 218.106, or on and after the initial start-up date. The certification shall include:

- A. The name and identification number of each coating as applied on each coating line;
- B. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.

ii. On and after a date consistent with 35 Ill. Adm. Code 218.106, the owner or operator of a subject coating line shall notify the Illinois EPA in the following instances:

- A. Any record showing violation of 35 Ill. Adm. Code 218.204 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
- B. At least 30 calendar days before changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d)(1) or (e)(1), as applicable. Upon changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d) or (e), as applicable.

28a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Section in Springfield, Illinois within 30 days after the exceedance or deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or deviation and efforts to reduce emissions and future occurrences.

b. Two (2) copies of required reports and notifications shall be sent to:

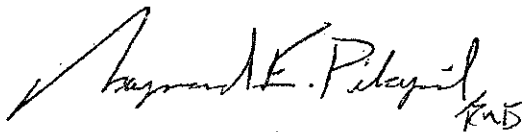
Illinois Environmental Protection Illinois EPA
Division of Air Pollution Control
Compliance and Enforcement Section (#40)
P.O. Box 19276
Springfield, IL 62794-9276

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and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Illinois EPA
Division of Air Pollution Control - Regional Office
9511 West Harrison
Des Plaines, Illinois 60016

If you have any questions on this permit, please contact Valeriy Brodsky at 217/785-1705.

Handwritten signature of Raymond E. Pilapil in black ink, with the initials 'RUB' written below the signature.

Raymond E. Pilapil
Acting Manager, Permit Section
Division of Air Pollution Control

Date Signed: 12/22/2014

REP:VJB:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the steel coil pickling plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emission is below the level (e.g., 10 tons/year for any single HAP and 25 tons/year for any combination of such HAP), at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is used and control measures are more effective than required in this permit.

<u>Emission Unit</u>	E M I S S I O N S (Tons/Year)			
	<u>PM</u>	<u>VOM</u>	<u>Single HAP</u>	<u>Combined HAPs</u>
Steel Coil Pickling Line and Three Hydrochloric Acid Storage Tanks	0.44		0.44	0.44
Coil Coating	-----	12.70	-----	12.70
Totals	0.44	12.70	7.90	13.14

VJB:psj



STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF AIR POLLUTION CONTROL
P.O. BOX 19506
SPRINGFIELD, ILLINOIS 62794-9506

STANDARD CONDITIONS
FOR
OPERATING PERMITS

May, 1993

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) grants the Environmental Protection Agency authority to impose conditions on permits which it issues.

The following conditions are applicable unless superseded by special permit conditions(s).

1. The issuance of this permit does not release the Permittee from compliance with state and federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or with applicable local laws, ordinances and regulations.
2. The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be ground for revocation under 35 Ill. Adm. Code 201.166.
3.
 - a. The Permittee shall not authorize, cause, direct or allow any modification, as defined in 35 Ill. Adm. Code 201.102, of equipment, operations or practices which are reflected in the permit application as submitted unless a new application or request for revision of the existing permit is filed with the Illinois EPA and unless a new permit or revision of the existing permit(s) is issued for such modification.
 - b. This permit only covers emission sources and control equipment while physically present at the indicated plant location(s). Unless the permit specifically provides for equipment relocation, this permit is void for an item of equipment on the day it is removed from the permitted location(s) or if all equipment is removed, notwithstanding the expiration date specified on the permit.
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 emission 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 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 facilities;
 - c. Does not take into consideration or attest to the structural stability of any unit or part of the project; and
 - d. 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.
6. The facilities covered by this permit shall be operated in such a manner that the disposal of air contaminants collected by the equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.
 7. The Permittee shall maintain all equipment covered under this permit in such a manner that the performance of such equipment shall not cause a violation of the Environmental Protection Act or regulations promulgated thereunder.
 8. The Permittee shall maintain a maintenance record on the premises for each item of air pollution control equipment. This records shall be made available to any agent of the Environmental Protection Agency at any time during normal working hours and/or operating hours. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.
 9. No person shall cause or allow continued operation during malfunction, breakdown or startup of any emission source or related air pollution control equipment if such operation would cause a violation of an applicable emission standard or permit limitation. Should a malfunction, breakdown or startup occur which results in emissions in excess of any applicable standard or permit limitation, the Permittee shall:
 - a. Immediately report the incident to the Illinois EPA's Regional Field Operations Section Office by telephone, telegraph, or other method as constitutes the fastest available alternative, and shall comply with all reasonable directives of the Illinois EPA with respect to the incident;
 - b. Maintain the following records for a period of no less than two (2) years:
 - i. Date and duration of malfunction, breakdown, or startup,
 - ii. Full and detailed explanation of the cause,
 - iii. Contaminants emitted and an estimate of quantity of emissions,
 - iv. Measures taken to minimize the amount of emissions during the malfunction, breakdown or startup, and
 - v. Measures taken to reduce future occurrences and frequency of incidents.
 10. If the permit application contains a compliance program and project completion schedule, the Permittee shall submit a project completion status report within thirty (30) days of any date specified in the compliance program and project completion schedule or at six month intervals, whichever is more frequent.
 11. The Permittee shall submit an Annual Emission Report as required by 35 Ill. Adm. Code 201.302 and 35 Ill. Adm. Code Part 254.

EXHIBIT C



June 14, 2012

Mr. Edwin Bakowski
Manager, Permit Section
Illinois Environmental Protection Agency
Division of Air Pollution Control
1021 North Grand Avenue East
Springfield, Illinois 62702

Via E-Mail and Regular Mail

**RE: April 2012 Draft FESOP Comments
NACME Steel Processing, LLC
I.D. No. 031600FWL
Application No.05100052**

Mr. Bakowski:

The following additional comments are being provided regarding the preliminary Draft Federally Enforceable State Operating Permit (FESOP) issued to the NACME Steel Processing, LLC (NACME) facility located at 429 West 127th Street in Chicago, Illinois (the facility) by IEPA letter dated April 26, 2012.

On May 23, 2012, I received email correspondence from Valeriy Brodsky, Permit Engineer for the Illinois Environmental Protection Agency (IEPA) responding to my May 15, 2012 draft FESOP comments letter. In the May 23, 2012 correspondence, Mr. Brodsky indicated that the IEPA has no issue with our request to delete conditions related to NESHAP Subpart SSSS applicability in the draft FESOP. Mr. Brodsky further indicated that the IEPA considers rust preventive oil application as being subject to NSPS Subpart TT and NACME operations fit within this definition. Additionally, no response was provided concerning our comments for draft FESOP Condition Nos. 4b and 11c.

While we agree with Mr. Brodsky regarding the non-applicability of the 40 CFR 63, Subpart SSSS, we would like to further respond to Mr. Brodsky's assertion that the application of the rust preventative oil at the facility is subject to the 40 CFR 60, Subpart TT and re-iterate our comments regarding the draft FESOP Conditions Nos. 4b and 11c.

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Concerning our initial response regarding the applicability of the NSPS outlined in 40 CFR 60, Subpart TT, we continue to assert that the protective oil application process used at NACME's facility does not fall within the definition of coating operations as used in the Standards. NACME is, thus, not subject to the Standards.

Permit Condition No. 2a

Condition 2a currently states that the Coil Coater at the facility is subject to NSPS for Metal Coil Surface Coating, 40 CFR 60, Subpart TT.

NACME Comment: As previously stated, the Metal Coil Surface Coating NSPS does not apply to operations at the NACME facility because the oil application process does not meet the specific definition of prime or finish coat operations in the Standard.

As stated in 40 CFR 60.460(a), the Metal Coil Surface Coating NSPS applies only to the following coating operations:

- Each prime coat operation,
- Each finish coat operation, and
- Each prime and finish coat operation combined when the finish coat is applied wet on wet over the prime coat and both coatings are cured simultaneously.

As listed in 40 CFR 60.461, the following specific definitions apply to coil coating operations subject to the NSPS

- *Prime coat operation* means the coating application station, curing oven, and quench station used to **apply and dry or cure** the initial coating(s) on the surface of the metal coil
- *Finish coat operation* means the coating application station, curing oven, and quench station used to **apply and dry or cure** the final coating(s) on the surface of the metal coil. Where only a single coating is applied to the metal coil, that coating is considered a finish coat

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As indicated, NACME applies a protective rust preventative oil to metal coils which involves the use of an oil application station at the end of the steel pickling line. The protective oil is not dried or cured and does not contain any solids. Therefore, the protective oil is not subject to the VOM content limits for this Subpart. The protective oil remains on the coil after application and no quenching of the oiled metal coils is required (e.g., there is no quench station on this process line).

Furthermore, review of other current permits issued by the Indiana Department of Environmental Management (IDEM) for other protective or lubricating oil application processes and guidance documents issued to states from the United States Environmental Protection Agency (USEPA) regarding what constitutes a metal coil coating operations provide further evidence that the application of a rust preventative oil is not subject to this NSPS.

Attachment A contains the following Technical Support Documents (TSDs) for air emission source permits issued by IDEM to facilities, which are available at the USEPA's Region 5 Division of Air and Radiation Indiana Permit Database, that perform rust preventative protective oil application processes onto metal coils:

- Ispat Inland, Inc. East Chicago, Indiana (Ispat) TSD for a Part 70 Source Construction Permit (Permit No. CP-089-10472-00316) – Ispat applies rust preventative oil to metal coils. The Federal Rule Applicability Section of the TSD (page 4 of 6) states that "the application of rust preventative oils to the steel coils is not subject to the New Source Performance Standard 326 IAC 12 (40 CFR 60, Subpart TT) because this rule only applies to coating operations which use a curing oven and quench station as part of the process".
- Syndicate Sales, Inc., Kokomo, Indiana (Syndicate) TSD for a FESOP Source (Permit No. F067-7699-00026) – Syndicate applies a petroleum lubricant to metal coils. The Federal Rule Applicability Section of the TSD (page 5 of 12) states that "where only a single coating is applied to the metal coil, that coating is considered a finish coat. The definition of Finish Coat Operation is the coating application station, curing oven, and quench station used to apply and dry or cure the final coating on the surface of the metal coil. The metal stamping process only involves coating metal coil with petroleum"

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lubricating oil to facilitate the shaping and cutting of the coil into metal stems in the stamping process. There are no curing ovens associated with the process. The metal stamping line does not fall under the definition of a finish coating operation, therefore, the requirements of 40 CFT 60.460, Subpart TT do not apply."

- Kasle Metal Processing, Jeffersonville, Indiana (Kasle) TSD for a Construction Permit (Permit No. 019-22372-00119) – Kasle applies a rust preventative surface coating to steel blanks. The Federal Rule Applicability Section of the TSD (page 4 of 5) states that "this source is not subject to the New Source Performance Standard, 326 IAC 12, 40 CFR 60.460, Subpart TT – Standards and Performance for Metal Coil Surface Coating Operations, which applies to prime coat, finish coat, and prime and finish coat combined operations because it is not a prime or finish coat operation".
- The USEPA Guidance Document (Document No. EPA-453/P-00-001) *National Emissions Standards for Hazard Air Pollutants: Metal Coil Surface Coating Industry Background Information for Proposed Standards*, while it does not specifically address the NSPS requirements, outlines the "Metal Coil Coating Industry Profile and Process Description" (Section 3). Within this section of the USEPA Guidance Document, the USEPA describes the metal coil coating process as one that includes "a wet station and one or more coating operations consisting of a coating application station, a curing oven, and a quench area".

Copies of the IDEM TSDs and the Section 3.0 of the USEPA *National Emissions Standards for Hazard Air Pollutants: Metal Coil Surface Coating Industry Background Information for Proposed Standards* are included in Attachment A.

The Ispat TSD clearly states that the application of a rust preventative oil to a steel coil is not subject to the NSPS because the rule only applies to coating operations which use a curing oven and quench station as part of the process.

As indicated in Mr. Brodsky's response, he indicated the roll oil falls under the definition of coating. As stated in the Syndicate TSD, an oil can be considered a coating and not be subject to the NSPS outlined in 40 CFR 60, Subpart TT.

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The Kasle TDS specifically states that the application of a rust preventative coating is not a prime or finish coat operation.

The USEPA's own *National Emissions Standards for Hazard Air Pollutants: Metal Coil Surface Coating Industry Background Information for Proposed Standards* supports NACME's position as it clearly states that a metal coil surface coating operation consists of a wet station and one or more coating operations consisting of a coating application station, a curing oven, and a quench area. If USEPA believed that a rust preventative surface coating without a curing oven or a quench station – such as NACME's here – fell within the definition of a metal surface coating operation and Subpart TT, then it would not have limited its guidance (or its definitions) to only those operations that include curing ovens and quenching stations. By doing so, the USEPA has clearly expressed its intention that Subpart TT not apply to a metal coating operation unless there is a curing oven or quench station involved. This conclusion is consistent not only with the definitions promulgated by USEPA itself in 40 CFR 60.461, but also with the application of those definitions by IDEM to coating lines similar to NACME's here as detailed above.

Taken together, the TSDs, the USEPA guidance document, and the definitions in Subpart TT provide convincing evidence that the application of a rust preventative oil onto the metal coils does not meet the definition of finish or prime coat operations and, as a result, are not subject to the NSPS requirements of 40 CFR 60, Subpart TT.

Permit Condition No. 2b

Condition 2b states that, pursuant to 40 CFR 60.462(a)(1), each owner or operator subject to 40 CFR 60, Subpart TT shall not cause to be discharged into the atmosphere, more than 0.28 kilograms per liter of coating solids applied for each calendar month.

NACME Comment: Based upon the information provided in the initial May 2012 draft FESOP response and the additional information provided in this correspondence, NACME requests revision of Condition 2a to state that the NSPS of 40 CFR 60, Subpart A and TT does not apply to metal coil protective oil application operations at the facility since the protective rust preventative oil application operation does not meet the definition of prime coat or finish coat

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operations as outlined in 40 CFR 60.461. As indicated above, 40 CFR 60, Subpart TT does not apply since the protective rust preventative oil application process do not meet the definition of either the prime coat or finish coating operations listed in 40 CFR 60.461 and the protective oil coating remains on the metal coils after application (e.g., is not cured or dried) and does not contain any solids.

Permit Condition No. 4b

Condition No. 4b indicates that no more than 8 pounds VOM per hour of organic material shall be discharged into the atmosphere from any emission unit.

NACME Comment: Per our previous comment regarding this permit condition, NACME requests that additional language be inserted into Permit Condition 4b that states the coil oil application operation is not subject to the limitations of 35 IAC 218.301 pursuant to 35 IAC 218.209 which states:

- No owner or operator of a coating line subject to the limitations of Section 218.204 of this Part is required to meet the limitations of Subpart G (Section 218.301 or 218.302) of this Part, after the date by which the coating line is required to meet Section 218.204 of this Part

Permit Condition No. 11c

Condition 11c references monthly and annual limits on HAP emissions for both individual and combined HAP emissions. Additionally, this Condition also references the NESHAP for Surface Coating of Metal Coil (40 CFR 63, Subpart SSSS).

NACME Comment: Per our previous comments, while the language in the Condition referencing the non-applicability of the NESHAP for Steel Pickling Operations in 40 CFR 63, CCC is accurate there is no regulation that limits monthly or annual individual or combined HAP emissions other than maintaining these HAP emission levels below the major source levels of 10 tons per year of individual HAPs and 25 tons per year combined HAPs.



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Therefore, in addition to the removal of the reference to the Surface Coating of Metal Coils that the IEPA has already agreed to, NACME requests that the monthly and annual emission limitations outlined in the current draft FESOP be removed. However, NACME understands the importance of minimizing the emissions of HAPs and would accept to have this Condition revised to limit individual HAP emissions to 9.0 tons per year and combined HAP emissions to 22.5 tons per year (below major source threshold levels) with no monthly limitations.

Permit Condition No. 13a and b/Permit Condition No. 14a and b

NACME Comment: As indicated in the comments regarding Permit Condition Nos. 2a and b, the protective oil application operation at the facility does not meet the definition of prime coat or finish coat operations and the Metal Coil Surface Coating NSPS does not apply. NACME request that Permit Condition Nos. 13a and b and 14a and b be removed from the FESOP.

Permit Condition No. 18/Permit Condition No. 19a and b/Permit Condition No. 20/Permit Condition No 25

NACME Comment: As indicated in the comments regarding Permit Condition Nos. 2a and b, 13a and b, and 14a and b, the protective oil application operation at the facility does not meet the definition of prime coat or finish coat operations and the Metal Coil Surface Coating NSPS does not apply. NACME request that Permit Condition Nos. 18, 19a and b, 20 and 25 be removed from the FESOP.

If you have any questions or require further information, please contact our consultant, Britt Wenzel of Mostardi Platt at 630-993-2123.

Respectfully Submitted,

A handwritten signature in cursive script, appearing to read "Britt E. Wenzel".

Britt Wenzel
Director, Environmental, Health & Safety Compliance Services

cc: J. DuBrock, National Processing Company
David Susier, National Material L.P.
Ms. Nancy Tikalsky, IAG

**Attachment A – IDEM Technical Support Documents and USEPA Guidance on
Metal Coil Coating Operations**

**Indiana Department of Environmental Management
Office of Air Management**

Technical Support Document (TSD) for New Construction and Operation

Source Background and Description

Source Name: Ispat Inland, Inc.
Source Location: 3210 Watling Street, East Chicago, Indiana 46312
County: Lake
Construction Permit No.: CP-089-10472-00316
SIC Code: 3312
Permit Reviewer: Bryan Sheets

The Office of Air Management (OAM) has reviewed an application from Ispat Inland, Inc. (Inland), relating to the construction and operation of the No. 6 Continuous Coating Line, which will galvanize steel sheets at a maximum capacity of 200,000 tons per year. The No. 6 Continuous Coating Line, consists of the following equipment:

- (a) One (1) electrical resistance welder exhausting inside the building.
- (b) One (1) alkali cleaning system, consisting of electrolytic and sodium hydroxide dunk tanks, and a brush scrubbers rinse tank, and exhausting inside the building.
- (c) One (1) natural gas-fired strip dryer, identified as source ID 250, with a heat input capacity of 2.04 million Btu per hour, and exhausting inside the building.
- (d) One (1) natural gas-fired radiant tube furnace heating section, identified as source ID 251A, with a heat input capacity of 102.05 million Btu per hour, and exhausting through one (1) stack, identified as 251.
- (e) One (1) natural gas-fired radiant tube furnace soaking section, identified as source ID 251B, with a heat input capacity of 5.4 million Btu per hour, and exhausting through one (1) stack, identified as 251.
- (f) Two (2) zinc pots, one (1) aluminum pot, one (1) zinc premelt pot, and one (1) aluminum zinc premelt pot, with electric induction heating for each pot, and all exhausting inside the building.
- (g) One (1) natural gas-fired galvaneal soaking furnace, identified as source ID 252, with a heat input capacity of 6.5 million Btu per hour, and exhausting inside the building.
- (h) One (1) natural gas-fired strip dryer, identified as source ID 253, with a heat input capacity of 2.04 million Btu per hour, and exhausting inside the building.
- (i) One (1) chem-treat roll coating system with one (1) natural gas-fired strip dryer, identified as source ID 254, with a heat input capacity of 2.05 million Btu per hour, and exhausting inside the building.
- (j) One (1) phosphate roll coating system with one (1) natural gas-fired infra-red furnace, identified as source ID 255, with a heat input capacity of 9.36 million Btu per hour, and exhausting inside the building.
- (k) Three (3) electrostatic oilers exhausting inside the building.

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 East Chicago, Indiana
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- (l) Natural gas-fired space heaters, identified as source ID 256, with a heat input capacity of 77.52 million Btu per hour, and exhausting through one (1) stack, identified as 258.
- (m) One (1) natural gas-fired boiler, identified as source ID 257, with a heat input capacity of 22.95 million Btu per hour, and exhausting through one (1) stack, identified as 257.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on December 17, 1998, with additional information received on January 25, 26 and 29, 1999.

Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (2 pages).

Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Allowable Emissions (tons/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	79.75	7.5
Particulate Matter (PM10)	79.75	7.5
Sulfur Dioxide (SO ₂)	0.6	0.6
Volatile Organic Compounds (VOC)	3.42	3.42
Carbon Monoxide (CO)	82.9	82.9
Nitrogen Oxides (NO _x)	211.5	211.5
Single Hazardous Air Pollutant (HAP)	1.78	1.78
Combination of HAPs	1.86	1.86

- (a) Allowable PM emissions for the boiler are determined from the applicability of rule 326 IAC 6-2-4. Allowable PM emissions from the remaining facilities are determined from the applicability of rule 326 IAC 6-1-2. PM is assumed to equal PM₁₀. See attached spreadsheets for detailed calculations.
- (b) The allowable emissions for the boiler and coating line based on the rules cited are greater than the potential emissions, therefore, the potential emissions are used for the permitting determination.
- (c) Allowable emissions (as defined in the Indiana Rule) of NO_x are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

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County Attainment Status

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. A portion of Lake County has been designated as nonattainment for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Portions of Lake County have also been classified as nonattainment for CO, PM₁₀ and SO₂. Therefore, these emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (c) Inland is located in the portion of Lake County classified as nonattainment for the above mentioned pollutants.

Source Status

Existing Source PSD, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	1,089
PM10	1,089
SO ₂	14,595
VOC	4,525
CO	5,434
NO _x	12,009

- (a) This existing source is a major stationary source because it is in one of the 28 listed source categories and at least one regulated pollutant is emitted at a rate of 100 tons per year or more.
- (b) These emissions were based on the Facility Quick Look Report, dated 1996.

Proposed Modification

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limit, where applicable):

Pollutant	PM (ton/yr)	PM ₁₀ (ton/yr)	SO ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	6.1	6.1	0.5	2.82	67.5	193.2
Contemporaneous Increases from No.1 Normalizer Preheater Furnace, Annealing Furnace for No.1 Normalizer, No. 5 Galvanizing Line Radiant Tube Furnace, HRCC Project and Vacuum Degasser (proposed)				22.8		
Contemporaneous Decreases						
Net Emissions	6.1	6.1	0.5	25.6	67.5	193.2
Emission Offset Significant Level	25	15	40	25	100	40

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Note: The natural gas usage at the space heating unit will be limited to 300 MMCF per year. Therefore, Inland will have enough NO_x credits to meet the requirements of 326 IAC 2-3 (Emission Offset).

This modification to an existing major stationary source is major for VOC and NO_x because the emissions increases are greater than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T-089-6577-00316) application on September 16, 1998. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Federal Rule Applicability

The 22.95 million Btu per hour boiler is subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60, Subpart Dc). However, there are no applicable requirements for a boiler that combusts only natural gas.

The application of rust preventative oils to the steel coils is not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR Part 60, Subpart TT) because this rule only applies to coating operations which use a curing oven and quench station as part of the process.

There are no other New Source Performance Standards (326 IAC 12) or National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61 and 63) applicable to this source.

State Rule Applicability

326 IAC 2-3 (Emission Offset)

Pursuant to 326 IAC 2-3 (Emission Offsets), the following requirements shall be satisfied:

- (a) The applicant shall demonstrate that all existing major sources owned or operated by the applicant in the state of Indiana are in compliance with all applicable emissions limitations and standards contained in the CAA and in this title. The Office of Enforcement has stated that there are no outstanding or unresolved issues for Inland as of February 11, 1999. Therefore, this requirement has been satisfied.
- (b) The applicant will apply emission limitation devices or techniques to the proposed construction or modification such that the lowest achievable emission rate (LAER) for the applicable pollutant will be achieved. Inland will substitute an additional 1.3 offset amount as allowed by 326 IAC 2-3-2(b)(3). Therefore, this requirement has been satisfied.
- (c) The applicant shall submit an analysis of alternative sites, sizes, production processes, and environmental control techniques for such proposed source which demonstrates that benefits of the proposed source significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification. The OAM has reviewed and accepted the alternative site analysis submitted by Ispat Inland, Inc. Therefore, this requirement has been satisfied.
- (d) VOC and NO_x emissions resulting from the proposed construction or modification shall be offset by a reduction in actual emissions of the same pollutant from an existing source or a combination of existing sources.

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For severe ozone nonattainment the minimum offset requirement is 1.3 to 1. The following calculation demonstrates that Ispat Inland, Inc. shall meet this requirement:

	NO _x (tons/yr)	VOC (tons/yr)
Project Emissions	193.2	2.82
Required Offsets (Project Emissions x 2.6)*	502.3	7.3
Available Offsets	532.1	11.0
Shutdown of 76" Hot Strip Mill (in 1995)	353.9	11.0
Shutdown of 100" Plate Mill (in 1995)	122.7	
Shutdown of No. 4 Slabber Pits 19-45 (in 1996)	55.5	
Excess Emission Credits	29.8	3.7

* The emissions are multiplied by 1.3 as required by 326 IAC 2-3-3, and an additional 1.3 substituted for LAER, pursuant to 326 IAC 2-3-2.

Since the credits are greater than offsets required by this rule, Inland complies with the requirements of 326 IAC 2-3 (Offset Emissions). After completion of this proposed modification, Inland has available offset credits from the No. 4 Slabber Pits 19-45 in the amount of 29.8 tons of NO_x/yr and from the 76" Hot Strip Mill in the amount of 3.7 tons of VOC/yr.

326 IAC 2-6 (Emission Reporting)

These facilities are subject to 326 IAC 2-6 (Emission Reporting), because the source emits more than 10 tons/yr of VOC and NO_x in Lake County. Pursuant to this rule, the owner/operator of this source must annually submit an emission statement of the source. The annual statement must be received by April 15 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

326 IAC 4-1 (Open Burning)

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of twenty percent (20%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

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326 IAC 6-1-2 (Nonattainment Area Particulate Limitations)

Particulate matter emissions from all combustion facilities, excluding the boiler which is regulated by 326 IAC 6-2-4, shall not exceed 0.01 grains per dry standard cubic foot (gr/dscf). These include all facilities exhausting to stacks 250 through 256. Particulate matter emissions from all other noncombustion facilities, including the electrical resistance welder and alkali cleaning system, shall not exceed 0.03 grains per dry standard cubic foot.

326 IAC 6-2-4 (Particulate Emissions Limitations for Sources of Indirect Heating)

The 22.95 MMBtu/hr natural gas-fired boiler is subject 326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating). Pursuant to 326 IAC 6-2-4, the particulate matter (PM) emissions shall be limited to 0.116 pounds per million BTU heat input because the source's total heat input capacity is 5465.3 MMBtu/hr. The limitation is based on the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} \quad \text{where } Q = \text{Total source heat input capacity (MMBtu/hr); and} \\ Pt = \text{Allowable emission rate (lb/MMBtu)}$$

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitation)

All of the combustion units associated with this project will be required to use natural gas as the only fuel. Therefore, the requirements of 326 IAC 7-1.1 will not apply.

326 IAC 8-2-4 (Coil Coating Operations)

The process of applying zinc, aluminum and oils to the steel coils are not subject to this rule because actual emissions of VOC from the coating operations will be less than 15 pounds per day.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 189 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This modification will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to Clean Air Act.
- (b) See attached spreadsheets for detailed air toxic calculations.

Conclusion

The construction of this continuous coating line will be subject to the conditions of the attached proposed Construction Permit No. CP-089-10472-00316.

**Indiana Department of Environmental Management
Office of Air Management**

**Technical Support Document (TSD) for a
Federally Enforceable State Operating Permit (FESOP) and Enhanced
New Source Review (ENSR)**

Source Background And Description

Source Name: Syndicate Sales, Inc.
Source Location: 2025 North Wabash Street
Kokomo, Indiana 46901-2063
County: Howard
SIC Code: 3089, 3469
Operation Permit No.: F067-7699-00026
Permit Reviewer: Trish Earls/EVP

The Office of Air Management (OAM) has reviewed a Federally Enforceable State Operating Permit (FESOP) application from Syndicate Sales, Inc. relating to the operation of a stationary plastic container/pot and metal floral stem manufacturing operation.

Permitted Emission Units and Pollution Control Equipment

There are no permitted facilities operating at this source during this review process.

Unpermitted Emission Units and Pollution Control Equipment Under Enhanced New Source Review (ENSR)

The source also consists of the following unpermitted facilities/units:

- (1) one (1) flow coating line consisting of:
 - (a) one (1) flow coater (Emission Unit ID No. 1) coating a maximum of 0.0818 plastic pots per hour, exhausting at one (1) stack (ID No. Vent 1);
 - (b) one (1) UV exposure room;
 - (c) two (2) vacuum metallizers;
 - (d) one (1) aqueous dye dip tank;
 - (e) two (2) rinse tanks; and
 - (f) one (1) electric drying oven.
- (2) one (1) metal stamping press line consisting of:
 - (a) three (3) metal stamping presses (Emission Unit ID Nos. 2, 3, and 4) coating a maximum of 0.1033 metal floral stems per hour; and
 - (b) one (1) packaging operation.

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Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(20):

- (1) natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units (Btu) per hour;
- (2) propane or liquefied petroleum gas, or butane-fired combustion sources with heat input less than six million (6,000,000) Btu per hour;
- (3) combustion source flame safety purging on startup;
- (4) VOC and HAP storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons;
- (5) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (6) application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings;
- (7) machining where an aqueous cutting coolant continuously floods the machining interface;
- (8) degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6;
- (9) cleaners and solvents having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100°F) or having a vapor pressure equal to or less than 0.7 kPa; 5 mm Hg; or 0.1 psi measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;
- (10) exposure chambers ("towers", "columns"), for curing of ultraviolet inks and ultra-violet coatings where heat is the intended discharge;
- (11) any operation using aqueous solutions containing less than 1% by weight of VOCs, excluding HAPs;
- (12) water based adhesives that are less than or equal to 5% by volume of VOCs, excluding HAPs;
- (13) forced and induced draft cooling tower system not regulated under a NESHAP;
- (14) paved and unpaved roads and parking lots with public access;
- (15) enclosed systems for conveying plastic raw materials and plastic finished goods;
- (16) purging of gas lines and vessels that is related to routing maintenance and repair of buildings, structures, or vehicles at the source;
- (17) equipment used to collect released material;
- (18) blowdown for any of the following: sight glass; boiler; compressors; pumps; and coding tower;
- (19) grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute;
- (20) a laboratory as defined in 326 IAC 2-7-1(20)(C);
- (21) a plastic molding operation, including five (5) plastic pellet storage silos and eighteen (18) plastic molding machines;
- (22) a hot stamping operation, including five (5) hot stamp machines;
- (23) a floral paper operation, including a waxer and a sheeter, and
- (24) a stemming machine production line, including machining operations and a paint spray booth.

Enforcement Issue

- (a) IDEM is aware that the following equipment has been constructed and operated prior to

Syndicate Sales, Inc.
 Kokomo, Indiana
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receipt of the proper permit:

- (1) one (1) flow coating line consisting of:
 - (a) one (1) flow coater (Emission Unit ID No. 1) coating a maximum of 0.0818 plastic pots per hour, exhausting at one (1) stack (ID No. Vent 1);
 - (b) one (1) UV exposure room;
 - (c) two (2) vacuum metallizers;
 - (d) one (1) aqueous dye dip tank;
 - (e) two (2) rinse tanks; and
 - (f) one (1) electric drying oven.
- (2) one (1) metal stamping press line consisting of:
 - (a) three (3) metal stamping presses (Emission Unit ID Nos. 2, 3, and 4) coating a maximum of 0.1033 metal floral stems per hour; and
 - (b) one (1) packaging operation.

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit will also satisfy the requirements of the construction permit rules.

Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on December 13, 1996. Additional information was received on September 26, 1997.

Emissions Calculations

See Appendix A: Emissions Calculations for detailed calculations (2 pages).

Potential Emissions

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as "emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility."

Pollutant	Potential Emissions (tons/year)
PM	0.0
PM-10	0.0
SO ₂	0.0
VOC	225.7
CO	0.0

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NO _x	0.0
Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.	
HAP	Potential Emissions (tons/year)
TOTAL	0.0

See attached spreadsheets for detailed calculations (2 pages).

- (a) The potential emissions (as defined in the Indiana Rule) of VOC are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) This source, otherwise required to obtain a Title V permit, has agreed to accept a permit with federally enforceable limits that restrict its PTE to below the Title V emission levels. Therefore, this source will be issued a Federally Enforceable State Operating Permit (FESOP), pursuant to 326 IAC 2-8.
- (c) Fugitive Emissions
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter emissions are not counted toward determination of PSD and Emission Offset applicability.

Limited Potential To Emit

- (a) To simplify recordkeeping and to accommodate unpredictable variations in production, the source has accepted federally enforceable production limitations that limit potential to emit VOC to 91 tons per 12 consecutive month period. This limit was established at 11/12 lbs of 99 tons per year to eliminate the effect that daily variations would have on any 365 day period. This limit consists of:
 - (i) 90.56 tons per year for the significant activities; and
 - (ii) 0.44 tons per year for the insignificant activities.
- (b) The table below summarizes the total limited potential to emit of the significant and insignificant emission units.

Process/ facility	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
Flow Coater	0.0	0.0	0.0	65.76	0.0	0.0	0.0
Metal Stamping Presses	0.0	0.0	0.0	24.80	0.0	0.0	0.0
Insignificant Activities	0.0	0.0	0.0	0.44	0.0	0.0	0.0

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Total Emissions	0.0	0.0	0.0	91.00	0.0	0.0	0.0
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Attached Table A summarizes the permit conditions and requirements.

County Attainment Status

The source is located in Howard County.

Pollutant	Status
TSP	attainment
PM-10	attainment
SO ₂	attainment
NO _x	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and oxides of nitrogen are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Howard County has been designated as attainment or unclassifiable for ozone.

Federal Rule Applicability

- (a) The metal stamping press line is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.460, Subpart TT), "Standards of Performance for Metal Coil Surface Coating". This rule applies to each prime coat operation, each finish coat operation, and each prime and finish coat operation combined, when the finish coat is applied wet over the prime coat, and both coatings are cured simultaneously. Where only a single coating is applied to the metal coil, that coating is considered a finish coat. The definition of a finish coat operation is the coating application station, curing oven, and quench station used to apply and dry or cure the final coating on the surface of the metal coil. The metal stamping press line only involves coating the metal coil with a petroleum lubricating oil to facilitate the shaping and cutting of the coil into floral stems in the stamping presses. There are no curing ovens or quench stations associated with this process. The metal stamping press line does not fall under the definition of a finish coat operation, therefore, the requirements of 40 CFR 60.460, Subpart TT do not apply.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) applicable to this source.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), which would require the source to submit an annual emission statement. Pursuant to this rule, any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or

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processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is enforceable. This source has accepted federally enforceable operation conditions which limit emissions of volatile organic compounds (VOC) to below 100 tons per year. Therefore, the requirements of 326 IAC 2-6 do not apply.

326 IAC 2-8-4 (FESOP)

This source is subject to 326 IAC 2-8-4 (FESOP). Pursuant to this rule, source wide VOC emissions must be limited to no more than 99 tons per year. The source has accepted a VOC usage limitation for the Flow Coater (ID No. 1) of 65.76 tons per 12 consecutive month period. By accepting this VOC usage limitation for the Flow Coater (ID No. 1), source wide VOC emissions are limited to 91.0 tons per 12 consecutive month period, thus the source satisfies the requirements of 326 IAC 2-8-4 and the requirements of 326 IAC 2-7 do not apply. These limitations will also render 326 IAC 2-2 not applicable.

326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

The flow coater is subject to the provisions of 326 IAC 8-1-6. This rule requires all facilities constructed after January 1, 1980, which have potential VOC emission rates of 25 or more tons per year, and which are not otherwise regulated by other provisions of 326 IAC 8, to reduce VOC emissions using Best Available Control Technology (BACT). Potential VOC emissions from the flow coater are 200.44 tons per year. Since the potential VOC emissions are greater than 25 tons per year, the requirements of 326 IAC 8-1-6 apply to the flow coater.

Syndicate Sales, Inc. has submitted a BACT analysis, dated February 19, 1996, as part of this FESOP application.

The options considered in the BACT analysis for the flow coater are:

- (1) Recuperative Thermal Incineration
- (2) Regenerative Thermal Incineration
- (3) Recuperative Catalytic Incineration
- (4) Regenerative Catalytic Incineration
- (5) Flare
- (6) Other Innovative Destruction Technologies

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- (7) Carbon Adsorption
- (8) Absorption
- (9) Condensation
- (10) Carbon Adsorption with Recuperative Thermal Incineration
- (11) Absorption and Incineration

It was determined that options 8, 10 and 11 are technically infeasible due to the following reasons:

- (6) None of the innovative destruction technologies such as biofilters or systems applying ultraviolet radiation seem well documented, in particular, process cost information is lacking. These options were not considered to be commercially available.
- (10) The combination of carbon adsorption with thermal oxidation is not a suitable VOC control technology for the flow coater because the inlet VOC concentration is too high. The VOC concentration in the desorb stream would exceed 25% of the LEL, making the concentrated stream unsuitable for thermal oxidation.
- (11) Absorption concentrators are typically suited for batch processes or to equalize pollutant concentrations in a variable stream. The physical characteristics that drive the absorption of pollutants into a liquid also limit the opportunity to remove these pollutants from the liquid stream. Because the combination of absorption with incineration has only limited application, it was not considered feasible.

The technically feasible options are recuperative thermal incineration, regenerative thermal incineration, recuperative catalytic incineration, regenerative catalytic incineration, a flare, carbon adsorption, absorption, and condensation. A cost analysis was performed to determine the economic feasibility of these control options for the flow coater VOC emissions. The cost analysis is based on a federally enforceable limited VOC throughput of 65.76 tons per year for the flow coater.

The tables below show the results of the cost analysis.

(A)

Capital Cost

Option	Base Price	Direct Cost	Indirect Cost	Total
Recuperative Thermal Incineration	(1)	(1)	(1)	296,596
Regenerative Thermal Incineration	(1)	(1)	(1)	509,598
Recuperative Catalytic Incineration	(1)	(1)	(1)	218,923
Regenerative Catalytic Incineration	(1)	(1)	(1)	171,417
Absorption	(1)	(1)	(1)	2,592,442
Carbon Adsorption	(1)	(1)	(1)	124,275
Condensation	(1)	(1)	(1)	281,923

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Flare	(1)	(1)	(1)	167,082
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(1) Total Capital Cost includes Base Price, Direct Cost and Indirect Cost.

(B)

Annual Operating, Maintenance & Recovery Cost

Option	Direct Cost	Indirect Cost	Capital Recovery Cost	Total
Recuperative Thermal Incineration	12,814	16,033	48,270	77,117
Regenerative Thermal Incineration	9,180	24,553	82,935	116,668
Recuperative Catalytic Incineration	15,097	12,928	33,994	62,017
Regenerative Catalytic Incineration	15,404	11,028	26,263	52,693
Absorption	13,255	107,867	421,908	543,030
Carbon Adsorption	198,222	9,140	19,270	226,632
Condensation	138,899	15,446	45,882	198,227
Flare	427,617	10,853	21,967	460,436

(C)

Evaluation

Option	Limited Potential Emissions (tons/yr)	Emissions Removed (tons/yr)	Control Efficiency (%)	\$/ton Removed
Recuperative Thermal Incineration	65.76	62.47	95	1,234
Regenerative Thermal Incineration	65.76	62.47	95	1,868

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Recuperative Catalytic Incineration	65.76	62.47	95	993
Regenerative Catalytic Incineration	65.76	62.47	95	843
Absorption	65.76	64.44	98	8,427
Carbon Adsorption	65.76	62.47	95	3,628
Condensation	65.76	46.03	70	4,306
Flare	65.76	64.44	98	7,145

Methodology:

Emissions removed = (limited potential emissions from warehouse) * (control efficiency)

\$/ton removed = total annual cost / emissions removed

The cost breakdown is as follows:

1. Capital Cost
 - a) Base price: purchase price, auxiliary equipment, instruments, controls, taxes and freight.
 - b) Direct installation cost: foundations/supports, erection/handling, electrical, piping, insulation, painting, site preparation and building/facility.
 - c) Indirect installation cost: engineering, supervision, construction/field expenses, construction fee, start up, performance test, model study and contingencies.

2. Annual Cost
 - a) Direct operating cost: operating labor (operator, supervisor), labor and material maintenance, operating materials, utilities (electricity, gas).
 - b) Indirect operating cost: overhead, property tax, insurance, administration and capital recovery cost (for 10 years life of the system at 10% interest rate).

From the cost analysis, six technology options appear to offer cost effectiveness less than \$5,000 per ton. Absorption and flare options are not cost effective. Carbon adsorption and condensation have marginal cost effectiveness, however, thermal destruction methods offer such greater cost effectiveness than the reclamation options that only the destruction methods were considered further. The annual cost of the destruction methods were compared to Syndicate Sales, Inc.'s average net profit before taxes for 1992 through 1995. The results expressed the total annual cost of the control options as a percentage of the average net profits before taxes for 1992 through 1995. The table below summarizes these results.

Control Option	Capital Cost	% of Net Profit	Annual Cost	% of Net Profit
Recuperative Thermal Incineration	296,596	514	77,117	133
Regenerative Thermal Incineration	509,598	882	116,668	202

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Recuperative Catalytic Incineration	218,923	379	62,017	107
Regenerative Catalytic Incineration	171,417	297	52,693	91

Based on this information, none of these control options are economically feasible. Because all options are either technically infeasible or economically infeasible, no VOC emission control has been determined to be BACT. Also, because the BACT analysis was based on an enforceable limited VOC throughput of 65.76 tons per year for the flow coater, this throughput limitation is part of the BACT determination. Thus, in summary, BACT for the flow coater has been determined to be a limited VOC throughput of 65.76 tons per year, no add-on controls, and the following work practices:

- (1) the cleanup solvent containers used to transport solvent from drums to work stations shall be closed containers having soft gasketed spring-loaded closures;
- (2) cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly;
- (3) any solvent that may be sprayed during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete.

The metal stamping press line is not subject to the requirements of 326 IAC 8-1-6 since potential VOC emissions from the three (3) stamping presses (ID Nos. 2, 3, and 4), constructed in 1982, are less than 25 tons per year.

326 IAC 8-2-4 (Coil Coating Operations)

The three (3) metal stamping presses (ID Nos. 2, 3, and 4) are not subject to the provisions of 326 IAC 8-2-4 since the presses were constructed in 1982, are located in Howard County, and potential VOC emissions are less than 25 tons per year.

326 IAC 8-2-9 (Miscellaneous Metal Coating)

The three (3) metal stamping presses (ID Nos. 2, 3, and 4) are not subject to the provisions of 326 IAC 8-2-9 since the presses were constructed in 1982, are located in Howard County, and potential VOC emissions are less than 25 tons per year.

There are no other 326 IAC 8 rules that apply.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8.4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in permit Section D are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds

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for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in permit Section D. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

The flow coater (ID No. 1) has applicable compliance monitoring conditions as specified below:

- (a) Total VOC usage in the flow coater shall be limited to 65.8 tons per twelve (12) consecutive month period, rolled on a monthly basis.
- (b) Quarterly reports shall be submitted to OAM Compliance Section. These reports shall include annual VOC usage, rolled on a monthly basis.

These monitoring conditions are necessary to ensure compliance with 326 IAC 2-8 (FESOP) and 326 IAC 8-1-6 (New Facilities; General Reduction Requirements).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) FESOP Application Form GSD-08.

None of these listed air toxics will be emitted from this source.

Conclusion

The operation of this plastic container and metal floral stem manufacturing operation will be subject to the conditions of the attached proposed FESOP No. F067-7699-00026.

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Table A

Stack/Vent ID: Vent 1				
Stack/Vent Dimensions: Ht: 35' Dia: 16" Temp: 77°F Flow: 1.980 acfm				
Emission Unit: Flow Coater				
Date of Construction: 7/83				
Alternative Scenario: N/A				
Pollution Control Equipment: N/A				
General Description of Requirement:	VOC usage limitation			
Numerical Emission Limit:	65.8 tons/yr			
Regulation/Citation:	326 IAC 2-8 and 326 IAC 8-1-6			
Compliance Demonstration:	Record keeping and Reporting			
PERFORMANCE TESTING N/A				
Parameter/Pollutant to be Tested:				
Testing Method/Analysis:				
Testing Frequency/Schedule:				
Submittal of Test Results:				
COMPLIANCE MONITORING				
Monitoring Description:	record keeping and reporting			
Monitoring Method:				
Monitoring Regulation/Citation:				
Monitoring Frequency:	monthly			
RECORD KEEPING				
Parameter/Pollutant to be Recorded:	VOC usage per month			
Recording Frequency:	monthly			
Submittal Schedule of Reports:	quarterly			
REPORTING REQUIREMENTS				
Information in Report:	VOC usage per month			
Reporting Frequency/Submittal:	quarterly			
Additional Comments:				

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name:	Kasle Metal Processing
Source Location:	5146 Maritime Road, Jeffersonville, IN 47130
County:	Clark
SIC Code:	3479
Operation Permit No.:	019-22372-00119
Permit Reviewer:	James Farrell

The Office of Air Quality (OAQ) has reviewed an application from Kasle Metal Processing relating to the construction and operation of a steel blanking facility. The steel blanking process shapes steel coils into blanks and then applies a non-HAP surface coating as a rust preventative.

New Emission Units and Pollution Control Equipment

The source consists of the following emission units and pollution control devices:

- (a) Two (2) EGL-1 application lines, applying rust preventive surface coating to steel blanks, (identified as EGL Application Line 1 and 2), with a maximum capacity of 300 feet per minute, each, using no control, exhausting to the atmosphere.
- (b) Two (2) wash lines (identified as Wash Line 1 and 2), with a maximum capacity of 300 feet per minute, each, using no control, exhausting to the atmosphere.
- (c) Two (2) 2.5 MMBtu Natural gas-fired boilers, identified as Boiler 1 and 2, using no control, exhausting to the atmosphere.
- (d) Four (4) 1.55 MMBtu Natural gas-fired Air Make-Up Units, with no unit I.D.'s and using no control, exhausting to the atmosphere.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A complete application for the purposes of this review was received on December 15, 2005.

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Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. The calculations can be found in the application file.

Potential to Emit Source Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA, the department, or the appropriate local air pollution control agency."

Pollutant	Potential to Emit (tons/yr)
PM	0.38
PM-10	0.38
SO ₂	0.03
VOC	3.17
CO	4.12
NO ₂	4.81

HAPs	Potential to Emit (tons/yr)
Single HAP	<10
Combination HAPs	<25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.

County Attainment Status

The source is located in Clark County.

Pollutant	Status Status
PM-10	Attainment
PM-2.5	Nonattainment
SO ₂	Attainment
NO ₂	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Basic Nonattainment
CO	Attainment
Lead	Attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Clark County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review.
- (b) Clark County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions pursuant to the Non-attainment New Source Review requirements.
- (c) Clark County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Fugitive Emissions
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

New Source PSD Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	<5
PM-10	<5
SO ₂	<10
VOC	<10
CO	<25
NO _x	<10
Single HAP	<10
Combination HAPs	<25

- (a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater, no nonattainment pollutant is emitted at a rate of 100 tons per year or greater, and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2 and 2-3, the PSD and Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This is the first air approval issued to this source.

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Federal Rule Applicability

- (a) This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60.460, Subpart TT – Standards and Performance for Metal Coil Surface Coating Operations, which applies to prime coat, finish coat and prime and finish coat combined operations because it is not a prime or finish coat operation. Therefore, this NSPS is not included in this exemption.
- (b) This source is not subject to the requirements of the New Source Performance Standard, 326 IAC 12, 40 CFR 60.40c, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, which applies to steam generating units constructed, modified or reconstructed after June 9, 1989 and has a maximum design heat input capacity of 29 megawatts (MW) (100 million Btu per hour (Btu/hr)) or less, but greater than or equal to 2.9 MW (10 million Btu/hr) because each of the boilers have heat input values of less than 10 million Btu/hr. Therefore, this NSPS is not included in this exemption.
- (c) The metal coil surface coating unit is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart MMMM – (Surface Coating of Miscellaneous Metal Part and Products) because it does not apply topcoat to automobile or light-duty truck body parts and is not a major source of HAPs.
- (d) The metal coil surface coating unit is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart SSSS – (Surface Coating of Metal Coil) because it is not a major source of HAPs.
- (e) The two (2) 2.5 MMBtu/hr boilers are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart DDDDD – Standards for Industrial, Commercial and Institutional Boilers and Process Heaters, because it is not a major source of HAPs.

State Rule Applicability – Entire Source

326 IAC 2-6 (Emission Reporting)

This source is not required to have an operating permit under 326 IAC 2-7, does not emit lead into the ambient air at levels ≥ 5 tpy, and is located in Clark County. Therefore, 326 IAC 2-6 does not apply.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.

State Rule Applicability – Individual Facilities

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of this steel blanking facility will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

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326 IAC 6-2-4 (Emission limitations for facilities specified in 326 IAC 6-2-1(d))
 Pursuant to 326 IAC 6-2-4(a) particulate emissions from indirect heating constructed after September 21, 1983 shall be limited by the following equation:

$$Pt = \frac{1.09}{Q^{0.25}}$$

where

Q = total source heat input capacity (MMBtu/hr)
 Pt = emission rate limit (lbs/MMBtu)

Therefore, particulate emissions from the two (2) 2.5 MMBtu/hr boiler shall not exceed 0.6 lb/mmBtu heat input because the total source maximum operating capacity heat input for indirect heating is less than 10 MMBtu/hr.

326 IAC 6-2-4 (Emission limitations for facilities specified in 326 IAC 6-2-1(d))
 This rule is not applicable to the air make-up units because they are not sources of indirect heating. Therefore, the requirements of 326 IAC 6-2-4 do not apply to the air make-up units.

326 IAC 6-3-1 (Particulate Emission Limitations for Manufacturing Processes)
 Pursuant to 6-3-1(b)(1), the two (2) 2.5 MMBtu boilers are exempt from the requirements of 6-3-1 because it uses combustion for indirect heating. Therefore, the requirements of 326 IAC 6-3-1 do not apply to the boilers.

326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies)
 The emission units at this source have negligible Particulate emissions. Therefore the requirements of 326 IAC 6-3-2 do not apply.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
 The potential emissions from this steel blanking facility are less than 25 tons per year. Therefore, 326 IAC 8-1-6 does not apply.

326 IAC 8-2-1 (Surface Coating Emissions Limitations)
 This source is located in Clark County, the potential to emit of VOC from the facility is less than twenty-five (25) tons per year and actual emissions are less than fifteen (15) pounds per day. Therefore, pursuant to 326 IAC 8-2-1, 326 IAC 8-2-4 (Coil Coating Operations) and 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) do not apply.

326 IAC 8-7-1 (Specific VOC Reduction Requirements for Lake, Porter, Clark, and Floyd Counties)
 This source is located in Clark County, and the potential to emit of VOC is less than 100 tons per year and the coating facility has less than ten (10) tons per year of VOC. Therefore, 326 IAC 8-7-1 does not apply.

Conclusion

The construction and operation of this steel blanking facility shall be subject to the conditions of the Exemption 019-22372-00119.

United States
Environmental Protection
Agency

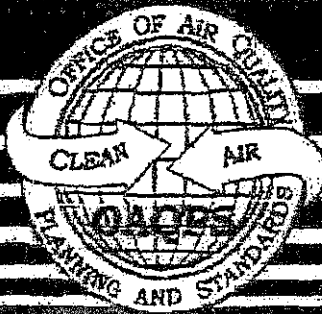
Office of Air Quality
Planning and Standards
Research Triangle Park, NC 27711

EPA-453/P-00-001
April 25, 2000
<http://www.epa.gov/ttn/ua/w>



National Emission Standards for Hazardous Air Pollutants: Metal Coil Surface Coating Industry Background Information for Proposed Standards

*See generally the
discussion at 3-1. Then 3-10, where
entire refers to "coating lines" including
curing ovens and quenching stations.*



3.0 METAL COIL COATING INDUSTRY PROFILE AND PROCESS DESCRIPTION ¹²

3.1 GENERAL PROCESS DESCRIPTION

The metal coil surface coating source category includes any facility engaged in the surface coating of metal coil. In this process, a coil or roll of uncoated sheet metal is coated on one or both sides and repackaged as a coil or otherwise handled. Although the physical configuration of the equipment used in coil coating lines varies from one installation to another, the individual operations generally follow a set pattern. The coil coating process begins with a coil (or roll) of bare sheet metal and, in most cases, terminates with a coil of metal with a dried and cured coating on one or both sides. The metal strip is unrolled from the coil at the entry to the coil coating line and first passes through a wet section, where the metal is cleaned and may be given a chemical treatment to inhibit rust and promote adhesion of the coating to the metal surface. In some installations, the wet section may also contain an electrogalvanizing operation in which zinc is applied through an electroplating process to a steel substrate. After the metal strip leaves the wet section, it is squeegeed and air dried and then passes to a coating applicator station.

Coating application stations may be used to apply a variety of coatings. In addition to protective or decorative coatings, adhesives and printed patterns using ink may also be applied. The most prevalent operation includes the application of protective and decorative coatings to one or both sides of the metal strip using rollers. Following the coating application, the strip passes through an oven where the temperature is increased to the desired curing temperature of the coating. The strip is then cooled by a water spray, air spray, or combination of the two. If the line is a tandem line, the first coating application is a prime coat and the metal strip next enters another coating applicator station where a top or finish coating is applied by rollers to one or both

sides of the metal. The strip then enters a second oven for drying and curing of the top or finish coat. This is followed by another cooling or quench station. The finished metal strip is then normally rewound into a coil and packaged for shipment or further processing. In some cases, the coated metal strip may be cut rather than rerolled into a coil. Most metal coil surface coating lines have accumulators at the entry and exit that permit the strip to move continuously through the coating process while a new coil is mounted at the entry or a full coil removed at the exit. Figure 3-1 is a schematic diagram of a typical, tandem coil coating line.

For existing coil coating lines, processing speed varies considerably, with some lines having processing speeds as high as 1,200 feet per minute³. The widths of the metal strip vary from a few inches up to 6 feet, and thickness may vary from about 0.006 inch to more than 0.15 inch. The lower thickness of 0.006 inch has been considered to be the line of distinction between metal coil and foil. However, 5 facilities have been identified that process coiled metal with a thickness both above and below 0.006 inch. Three of these facilities process 5 percent foil on each line, the fourth facility processes less than 25 percent foil on one of 6 coating lines in the facility, and the fifth facility processes 86 percent foil on one of 9 coating lines in the facility. The processing of foil is considered to be part of the paper and other web surface coating source category. Thus, there is some overlap between coil coating processes and foil coating processes within individual coil coating facilities. Unless a facility reported 100% of its substrate(s) as being below 0.006 inch, the facility was considered to be part of the metal coil surface coating source category.

3.2 INDUSTRY PROFILE

A total of 110 companies performing metal coil surface coating operations were identified through literature sources and stakeholder contacts. Information collection requests (ICRs) were sent to each of these companies in the summer of 1998. The intent of the survey was to acquire data on HAP use and emission control in metal coil surface coating operations and associated ancillary activities such as storage of HAP-containing materials in tanks, wet section operations, equipment cleaning, and wastewater treatment.

3-3

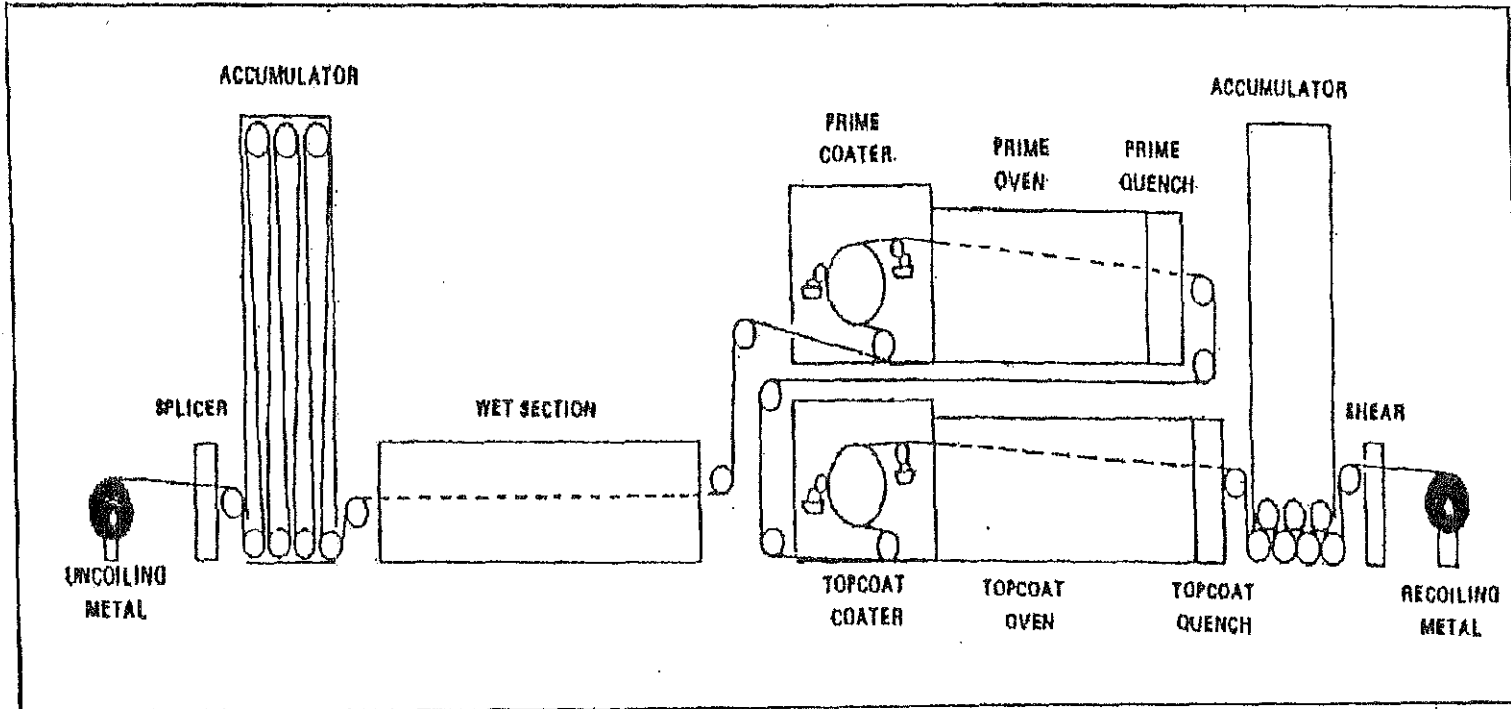


Figure 3-1. Typical Tandem Coil Coating Line

Responses were received from 119 facilities, of which 26 indicated that the facilities are not coil coaters, 2 provided information showing that the facility only coats foil, and two were not in operation in 1997. Therefore, 89 coil coating facilities returned completed questionnaires; 14 companies did not respond to the questionnaire.

The information collected from the metal coil surface coating industry was entered into a database. The metal coil surface coating MACT database (MACT database) contains a total of 82 facilities, excluding 7 facilities that classified the entire ICR response confidential business information (CBI). The MACT database facilities had a total of 125 coating lines reported. Appendix B of this document contains information on plant location, number of lines, type of control device used, and annual HAP emissions.

Major markets for coil coated metal include the transportation industry, building products industry, large appliance industry, can industry, and packaging industry. Other end products include coated tape rules, ventilation systems for walls and roofs, lighting fixtures, office filing cabinets, cookware, and sign stock. The industry has maintained a positive growth rate for a number of years as new end uses for precoated metal have continued to emerge.

Although coil coated metal is used in a wide variety of products, metal coil surface coating is typically not a product specific operation but rather is a distinct process. Many of the other surface coating source categories being regulated under section 112 of the Act are product specific, such as the metal can and large appliances source categories. For the purposes of standard development, the EPA considers any coil coating process, regardless of the end product, as part of the metal coil source category. Product-specific source categories include surface coating operations that are not coil coating processes.

Types of metal processed by the coil coating industry are mainly aluminum, cold rolled steel, cold rolled steel (galvanized on-line), hot-dipped galvanized steel, and galvalum/zincaluminum. Small quantities of other metals including brass are also coated. Coil coated metal is fabricated into end products after it is coated, thus eliminating the need for post-assembly painting. Toll and captive coaters represent the two basic industry divisions. Toll coaters produce metal that is coated in accordance with specifications of their customers. Captive coaters both coat the metal and fabricate it into end products within the same company. Examples of captive coaters are can manufacturers who have dedicated coil coating lines for metal used in the can manufacturing

process, and housing products manufacturers who coat the material for their products using company owned and operated coil coating lines. Some plants perform both toll and captive operations. Data from the MACT database indicate that approximately 40% of the facilities reported being toll coaters, 38% reported being captive coaters, and 22% reported performing both toll and captive coating.

3.3 COATINGS

The types of coatings applied in coil coating operations include a wide variety of formulations. Among the more prevalent types are polyesters, acrylics, fluorocarbons, alkyds, vinyls, epoxies, plastisols, and organosols. Table 3-1 lists the coatings commonly used in the industry and gives the approximate range of organic solvent content of each. In addition to these traditional coatings, adhesives, bondable backers, strippable protective coatings, lacquers, teflons, liquid rubber, graphite, kynar, latex, extruded synthetic rubber-based solid resins, and other non-traditional coatings are also used by the industry⁵. The majority of the coatings, estimated at about 85 percent⁶, are organic solvent based and have solvent contents ranging up to 80 percent by volume with most being in the range from 30 to 70 percent. The remaining 15 percent of coatings are mostly of the waterborne type which also contain some organic solvents ranging from about 2 to 15 percent by volume⁷. While waterborne coatings are in use at a number of coil coating facilities, they are not available in formulations that are suitable for all end product applications. The choice of waterborne versus solvent borne coatings usually depends on the end use of the coated metal and the type of metal used. The most prevalent use of waterborne coatings is on aluminum used for siding in the construction industry. Other uses include printing plates, suspended ceiling systems, and body and endstock for food cans.

High-solids coatings in the form of plastisols, organosols, and powder are also used to some extent by the coil coating industry. Because these coatings have a lower organic solvent content, potential organic emissions are lower than from the other, more commonly used coatings. However, these coatings also have limited applicability and are not available in formulations suitable for use on all end products. Typical uses for these coatings are residential siding, drapery hardware, and other products.

Little data have been identified that represent the HAP content of coatings used in the

metal coil surface coating industry. Information provided by one of the coating suppliers⁸ for three typical coatings showed HAP contents ranging from about 5 to 28 percent by weight. Reported data from the MACT database indicate that HAP contents for all coatings used in the coil coating industry range from 0 to 95 percent by weight, with an average reported value of approximately 16 percent.

Table 3-1. Typical Coatings Used in Metal Coil Surface Coating

Coatings	Volatile Content (Weight %)
Acrylics	40-45
Adhesives	70-80
Alkyds	50-70
Epoxies	45-70
Fluorocarbons	55-60
Organosols	15-45
Phenolics	50-75
Plastisols	5-30
Polyesters	45-50
Silicone Acrylics & Polyesters	35-60
Urethanes	60-75
Inks	50-65
Solution Vinyls	75-85
Vinyls	60-75

Source: Reference 4.

3.4 PROCESS DESCRIPTIONS, CURRENT INDUSTRY PRACTICES, AND EMISSION SOURCES

Although specific steps in a coil coating operation differ between plants, most have a common series of steps that include storage and handling of raw materials and a coating line that includes a wet section and one or more coating operations consisting of a coating application station, a curing oven, and a quench area. Most plants also generate wastewater and have some

type of wastewater treatment system. The following paragraphs provide brief descriptions of the common operations found on coil coating lines and provides general information regarding potential HAP emissions.

3.4.1 Storage and Handling of Coatings and Other Materials

Many of the coatings, solvents, and wet section chemicals are delivered and stored in 55 gallon drums but may also be delivered and stored in totes, which are transportable containers with a capacity generally in the range of from 200 to 500 gallons. Some plants also receive raw materials in bulk by tank trucks or rail cars and store the materials in bulk storage tanks. These tanks may be located inside a building or may be outdoors either above ground or underground. For raw materials delivered and stored in drums or totes, no emissions should occur during normal storage provided that they typically are kept sealed and generally do not leak. Emissions would only occur when the drums or totes are opened.

Where coatings are delivered by tank truck or rail car, working loss emissions occur when the coatings are pumped from the delivery vehicle to bulk storage tanks. Some tanks are vented to the tank trucks while they are being filled, thus making working losses negligible. During storage, daily temperature fluctuations generate breathing loss emissions. Breathing losses would be expected to be low for tanks that are underground or enclosed in controlled temperature environments relative to tanks that are outdoors, above ground and exposed to diurnal temperature cycles. Based on data from the MACT database, emissions from storage tanks account for approximately 2% of nationwide HAP emissions from metal coil surface coating operations.

Before application of the coatings to the coil, the coatings are typically stirred. They may also be thinned with solvent to adjust the viscosity. In some cases, coatings are mixed together. One example is mixing to achieve a particular color. Another example is the blending of excess coatings together to use as a backer. Another coating modification operation, intermixing, involves adding ingredients to perform coating color tinting (with no pigment dispersion). Data from ICR responses indicate that emissions from mixing and thinning account for approximately 3.5% of nationwide HAP emissions from metal coil surface coating operations.

3.4.2 Wet Section Pretreatment

The wet section of a metal coil surface coating line includes cleaning steps that may use

water, caustic cleaners, brushing, or acid treatment. Processes may include spray applications of materials or may include submersion of the metal strip. Specific processes included in the wet section depend on the type of metal substrate, characteristics of the coatings to be applied, and other parameters. The chemical treatments used in the wet section may contain HAP. Data from ICR responses indicate that HAP emissions from wet section operations account for approximately 0.29% of nationwide HAP emissions from metal coil surface coating operations.

3.4.3 Coating Application Stations

At the coating application stations, coatings are applied by rollers to one or both surfaces of the metal strip as it passes through the station. Emissions of HAP occur when HAP-containing solvents contained in the applied coatings evaporate. It is estimated that between 0 and 15 percent of the coating solvent evaporates at the coating station⁹. Data from the MACT database indicate an average of approximately 9.1 percent of coating solvent evaporation taking place at the coating station. If HAP-containing cleaning solvents are used, emissions of HAP also occur during cleaning of the paint rollers and other parts of the application station between coating sessions or when a color change is made. Cleaning may be carried out in place using solvent and rags, or portions of the coaters may be removed for cleaning. Data for HAP emissions from parts and equipment cleaning were available for 40 percent of the facilities that returned ICR responses. For these facilities, parts and equipment cleaning HAP emissions account for approximately 4 percent of nationwide HAP emissions from metal coil surface coating operations.

At many plants, the coating application stations are enclosed in rooms. Because air is drawn into the ovens from these rooms, it is generally believed that a large fraction, and in some cases all, of the solvent that evaporates in this area is captured by the ovens. Hoods or "snouts" may be used to increase the fraction of solvent emissions captured by the ovens. Plants may also use smaller coating station enclosures, which require less ventilation air, and are not occupied by workers except when the enclosure is opened for maintenance or inspection. On lines that do not have coating rooms or smaller enclosures, an exhaust hood is frequently installed directly over the roll coaters to exhaust the solvent that evaporates in that area. In these cases, the hoods may be exhausted to the ovens, a control device, or to the atmosphere. Some plants do not use hoods or enclosures around the coating application stations; therefore, the majority of the solvent evaporated at the coating station would be emitted to the atmosphere. Data from the MACT

database indicate that permanent total enclosures, partial enclosures, hoods, floor sweeps, extra ventilation to control devices, walls around coating stations, and oven extensions are used throughout the metal coil coating industry as enclosure and capture methods.

3.4.4 Curing Ovens

After coatings are applied to the surface of the metal strip, the strip enters an oven where heat is applied to evaporate the organic solvent and water contained in the applied coatings. An estimated 85 to 100 percent of the organic solvent content of applied coatings evaporate inside the curing ovens¹⁰. Data from the MACT database indicate an average of approximately 90 percent of the organic solvent content of applied coatings evaporating inside the curing ovens. Most curing ovens used in coil coating operations are direct fired and use natural gas as fuel. Many ovens are designed to use propane as a backup fuel in case of natural gas curtailments. Ovens heated by fuel oil or electricity are used in some plants, but to a much lesser extent than those heated by natural gas. The heat input to the ovens must be sufficient to evaporate the solvent in the coatings, to bring the metal and coatings up to the design temperature, usually in the range of 375 to 600 °F, to replace the heat lost from the ovens by radiation and conduction, and to heat dilution air to oven operating temperature. Oven ventilating air (or dilution air) is normally the largest single factor in the total oven heat load. Data from the MACT database indicate an average oven exhaust gas temperature of approximately 560 degrees Fahrenheit.

Solvent borne coatings, if uncontrolled, would result in higher organic emissions from the oven than either waterborne coatings or high solids coatings. Emissions of HAP compared to organic emissions depend on the proportion of HAP as compared with non-HAP solvents in the coatings.

3.4.5 Quench Area

When the metal strip exits the curing oven, it is cooled, usually by a water spray, an air spray, or a combination of the two before being repackaged as a coil or passing to another coating station. An estimated 0 to 2 percent of the organic solvent in the applied coatings is released in the quench area¹¹. Data from ICR responses indicate an average of approximately 0.6 percent of the organic solvent in the applied coatings is released in the quench area. The quench area is normally an enclosed area adjacent to the exit from the curing oven and a large fraction of the emissions released in this area are estimated to be captured by the oven ventilation system.

However, at some plants, the quench area is vented directly to the atmosphere.

3.4.6 Wastewater Handling and Treatment

Most plants generate wastewater from wet section operations, quenching operations, or both. Based on data from ICR responses, organic solvents are not typically used in the wet section. Consequently, not much organic solvent gets into plant wastewater. Response data from the ICRs indicate that wastewater handling and treatment operations account for approximately 0.07 percent of nationwide HAP emissions from metal coil coating operations. Coil coating wastewater may contain chromium compounds, but the potential for air emissions of these compounds is small. Wastewater may also be generated by clean up activities at plants that use waterborne coatings.

3.4.7 Baseline Emissions

Information collection requests were sent to 110 companies performing metal coil coating operations that were identified through literature sources and stakeholder contacts. Responses were received from 119 facilities. Twenty-six of those facilities indicated that they are not coil coaters, 2 provided data showing that the facility coats foil only, and two facilities were not in operation in 1997. Therefore, 89 coil coating facilities returned completed ICRs; 14 companies did not respond to the questionnaire. The surveyed facilities were asked to provide facility HAP emissions from metal coil surface coating operations as well as HAP emissions from specific unit operations associated with metal coil surface coating. Total nationwide HAP emissions from metal coil surface coating operations were calculated to be 2484 tons in 1997 by summing facility HAP emissions reported by these facilities.

3.5 REFERENCES

1. U.S. Environmental Protection Agency. Metal Coil Surface Coatings MACT Docket Number A-97-47 Item Numbers II-D-1 through II-D-113. ICR Responses. Office of Air Quality Planning and Standards. Research Triangle Park, NC. Responses received September 1998-April 1999.
2. U.S. Environmental Protection Agency. Metal Coil Surface Coating Industry-Background Information for Proposed Standards. Office of Air Quality Planning and Standards. Research Triangle Park, NC. EPA-450/3-80-035a. October 1980.
3. Reference 1.

4. Reference 2, p. 3-4 updated with information from Reference 1.
5. Reference 1.
6. Reference 2, p. 3-2.
7. Reference 2, p. 3-2 and 3-5.
8. Letter from Jelf, III, William E., Akzo Nobel Coatings, Inc. to Lacy, Gail, US EPA. September 12, 1997. Data sets for three (3) typical coil coatings.
9. Reference 2, p. 3-7.
10. Reference 9.
11. Reference 9.