

ILLINOIS POLLUTION CONTROL BOARD  
April 9, 1992

IN THE MATTER OF:	)	
	)	
AMENDMENTS TO 35 ILL. ADM.	)	R91-35
CODE SUBTITLE B: AIR	)	(Rulemaking)
POLLUTION PM-10 AMBIENT LIMITS	)	
AND EPISODE REGULATIONS;	)	
35 ILL. ADM. CODE 212, 243	)	
and 244	)	

Adopted Rule. Final Order.

OPINION AND ORDER OF THE BOARD (by B. Forcade):<sup>1</sup>

On November 19, 1991, the Illinois Environmental Protection Agency (Agency) filed this proposal for rulemaking. The Board accepted the proposal for hearing on November 27, 1991. The Board also accepted the Agency's certification that this rulemaking is federally required pursuant to Section 28.2 of the Environmental Protection Act (Act) (Ill. Rev. Stat. 1991, ch. 111 1/2, par. 1028.2), as amended by P.A. 86-1409.

On December 13, 1991, the Board received a Motion to Amend the Proposal filed by the Agency, seeking to amend Section 212.424 to correct an inadvertent nonsubstantive error which was included in the original proposal filed by the Agency in R91-6. The error was not discovered until the rule was filed and effective. The Agency seeks to amend this proposal as Section 212 is open in this docket and "it would be expedient to make this correction in this docket". (Ag. Mot. 2). The Board granted the Agency's motion, on December 19, 1991 and sent the proposal to first notice. On January 9, 1992, the Board determined that an Economic Impact Statement was not required for this rulemaking.

The Board held two hearings on this proposal, one in Chicago on January 28, 1992 and one in Springfield on January 30, 1992. The Agency presented testimony in Chicago supporting its proposal. In addition to the Agency, the Illinois Steel Group (Steel Group) spoke at both hearings in support of the rulemaking.

The Board also received public comments from the Steel Group as well as the Agency. In addition, the United States Environmental Protection Agency (USEPA), the Department of Energy and Natural Resources (DENR) and the Administrative Code Division of the Secretary of State's Office also filed comments.

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<sup>1</sup> The Board wishes to acknowledge the contributions of attorney Marie Tipsord who assisted in the preparation of the Opinions and Orders in this proceeding and who acted as hearing officer.

On March 11, 1992, the Board sent the proposal to second notice. The Board did not substantively amend the proposal at second notice. During second notice the Board made several nonsubstantive changes in response to request by Joint Committee on Administrative Rules (JCAR). The Board today adopts the rule as amended.

The Board notes that the Clean Air Act, as amended on November 15, 1990, requires Illinois to adopt and submit a state implementation plan (SIP) for PM-10 by November 15, 1991. (42 U.S.C. § 7513a). According to the Agency's statement of reasons in support of this proposal, the PM-10 standards were adopted by USEPA on July 1, 1987. Additionally, the Clean Air Act Amendments of 1990, which established the November 15, 1991 deadline for submittal of a PM-10 SIP, were signed into law on November 15, 1990. However, the Agency did not submit this proposal to the Board until November 19, 1991, 4 days after the November 15 deadline for submittal to USEPA. The Board proceeded with this rulemaking as expeditiously as possible, while conforming with the requirements imposed by statute.

#### DISCUSSION

The Board today sends the proposal to final adoption, making only minor changes requested by JCAR. The Board concludes that the Agency adequately supported its proposal and established that the proposal was economically reasonable and technically feasible. In addition the Board notes the regulated industry agreed with the proposed limitations and indicated support for the proposal overall.

This proposal is intended to regulate particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers, which is known as PM-10. The proposal represents one part of Illinois' submittal of a complete SIP for the control of PM-10 emissions. Pursuant to Section 189 of the Clean Air Act, as amended in 1990, Illinois is to adopt and submit its plan by November 15, 1991. This proposal is directed at state-wide implementation of PM-10 regulations. The Board is currently considering a proposal to control PM-10 in the McCook and Lake Calumet areas in Cook County and in Madison County (R91-22). Also, the Board has completed a regulation to control PM-10 in the Oglesby area in LaSalle County, in docket R91-6.

On July 1, 1987 (52 FR 24634), USEPA revised the National Ambient Air Quality Standards (NAAQS) for particulate matter. The revision replaced the use of total suspended solids (TSP) with PM-10. The USEPA set a primary 24-hour PM-10 standard of 150 micrograms per cubic meter, with no more than one exceedence allowed per year. The annual PM-10 standard was set at a level of 50 micrograms per cubic meter, in the form of an annual arithmetic mean.

The USEPA also revised requirements with respect to emergency episodes. "Episodes are periods of extremely high concentrations of specific air contaminants, i.e., 'significant harm levels' well in excess of the NAAQS that are caused by unusual weather patterns." (Tr. 1 p. 13). The Agency stated that such patterns prevent normal dispersion of air contaminants that can only be prevented by extraordinary emission reducing actions. (Tr. 1 p. 13). The regulations set forth what steps are taken during such periods to prevent the occurrence of significant harm. The USEPA adopted 600 micrograms of PM-10 per cubic meter as a 24-hour average as the significant harm level. This proposal adopts the USEPA standards for Illinois.

In addition to the change from a TSP to a PM-10 standard, the Agency is attempting in this proposal to:

1. address present and proposed USEPA stipulations regarding the interstate transport of air contaminants, particularly ozone precursors, during episode conditions, and
2. respond to the National Weather Service decision to discontinue the routine issuance of air stagnation advisories.

The existing language of 40 CFR 51.151 requires the State Implementation Plan to contain contingency plans for Air Quality Control Regions, some of which Illinois shares with other states. The contingency plans are to "provide for taking action necessary to prevent ambient pollution concentrations at any location in such region from reaching (significant harm levels). (Emphasis supplied.)" (Tr. 1 p. 17). Therefore, the Agency has proposed amendments to Section 244.107 which remove any ambiguity in the current episode regulations as to whether emission reductions can be required in Illinois based on out-of-state episode levels caused by Illinois sources.

The proposed amendments also allow yellow alert, red alert or emergency stages to be required in one geographical area because of air contaminant concentrations in another area, if a determination is made by the Director of the Agency that such actions are necessary.

The proposal does not alter the requirement that an episode must be declared when either: 1) an Air Stagnation Advisory (ASA) is declared by the National Weather Service; or 2) certain pollutant specific air contaminant levels occur in an Air Quality Control Region that includes part of Illinois. However, the National Weather Service has discontinued the routine issuing of ASAs due to extensive air pollutant monitoring instrumentation statewide. Episodes can be declared at virtually any location on

the basis of actual monitoring data rather than just because of a weather forecast.

The Agency further stated that:

The Agency therefore anticipates that nearly all future episodes will be declared on the basis of specific pollutant levels rather than just because of a general potential for high air pollution, and proposes that the first episode stage always be termed an "advisory" rather than a "watch". The Agency will therefore be "advising" that elevated pollutant levels have already occurred rather than "watching" to see if they do occur. The proposed amendments accordingly delete all references to "watch" and require that the pollutant-specific notification provisions of Section 244.168 include advisories as well as alerts and emergencies. (Tr. 1 p. 17).

The Agency has also included 1) a reference to the Agency in general in the episode notification requirement, rather than to the Agency's Emergency Action Center; and 2) a change in the ozone advisory level from a 2-hour ozone concentration to a 1-hour ozone concentration of 0.12 parts per million.

The episode notification requirement is being amended by deleting reference to the Agency's Emergency Action Center because that center is now concerned only with accidental spills and other incidents involving the sudden release of toxic or otherwise hazardous contaminants into the environment. The Agency's Ambient Air Monitoring Section currently has primary technical responsibility for determining the presence of air pollution episodes caused by the effect of unusual atmospheric conditions on routine air emissions.

The Agency stated that the advisory level change from a 2-hour to a 1-hour concentration of ozone at 0.12 parts per million (ppm) or more is considered minor and its effect will be almost negligible. The Agency explained that no advisory can be declared at the 0.12 PPM 1-hour level unless conditions are such that there is a reasonable expectation of the same or higher concentrations on the following calendar day. The Agency believes that such an expectation is an almost certain guarantee that a 1-hour 0.12 ppm or greater concentration will persist into the next hour. Therefore, the Agency believes that there should be no more advisories declared at the 1-hour ozone advisory level than at the current 2-hour level.

In addition to the amendment discussed above, the Agency proposal includes revisions to two rules which control particulate



emissions for certain iron and steel sources. The Agency stated that these rules were being proposed for two reasons:

First the Blast Furnace Cast House rule responds to the USEPA's disapproval of the current Illinois rule while the Coke Oven Quenching rule responds to the USEPA's conditional approval of the current Illinois rule. Second, these rules, which were initially developed to control total suspended particulate emissions, also control PM-10 to the extent necessary to form the basis of the State Implementation Plan for PM-10. (Attachment 1 p. 1).

The Agency stated and the Steel Group agreed that these amendments represent the current industry standard. The industry is already meeting the emission levels set forth in the proposal or is prepared to meet the standards. Therefore, industry supports the proposal. (Tr. 1 p. 37, 48; Tr. 2 p. 11 and 17).

The Board notes that there is one issue which was raised at hearing which bears further comment. The Agency and the representatives from the Steel Group were asked about the definition of "opening" as used in this regulation. Mr. Moore testified that his understanding of "opening" is that: "openings that are intended in the regulations are the normal openings that are found at various buildings, in particular roof monitors are surely openings and other traditional openings. What is not intended to be encompassed by the word opening is a small hole or, you know, a crack in the building that may have not been there very long and doesn't let much material out." (Tr. 1 p. 39-40). Mr. Krikau testified that: "the steel industry's opinion that the word opening means such things as roof monitor, ventilators, windows that don't have any glass in it, open doors. Things of that nature, which is an opening of some substantial size. What it doesn't mean to us is an opening where a bolt has come out of a piece of sheathing that is holding the side walls together or a seam on the side of the building that has split open or something of that nature, which is minor in size." (Tr. 1 p. 49-50). Given this testimony, the Board construes "opening" as used in this rule as meaning openings such as roof monitors, ventilators, windows without glass. The Board construes that "opening" does not mean openings such as cracks, bolt holes or other inadvertent spaces in the roof.

#### TECHNICAL FEASIBILITY AND ECONOMIC REASONABLENESS

In discussing the technical feasibility and economic reasonableness of the amendments regarding the episode portions of the proposal the Agency stated that:

The proposed episode amendments will have no

effect whatsoever on the technical feasibility of the current regulations because they call for no new kinds of actions, nor do they eliminate any previously required actions. (Tr. 1 p. 30)

In addition the Agency further indicated that the proposal will have "an immeasurable effect on the frequency of air pollution advisories, yellow alerts, red alerts and emergencies." (Tr. 1 p. 30). In fact, the Agency believes that the proposal will reduce the likelihood of particulate episodes. (Tr. 1 p. 30).

The Agency also explained that it is unlikely that Illinois will have increased episodes resulting only from high out-of-state pollutant concentrations. The Agency bases its belief on past history showing that "no episode stage in Illinois has ever been declared based only on out-of-state concentrations." (Tr. 1 p. 31).

With regard to the amendments dealing with the blast furnace cast house and by-product coke plant quenching operations, the Agency indicated that no new economic constraints would be added. As previously stated, the affected industry is meeting the standards or will be meeting the standards. In addition, these proposed amendments are necessary to meet federal requirements. The Agency also stated that: "[i]mprovements completed in the past few years have reduced the particulate emission levels and allowed RACT demonstration for these facilities." (Attachment 1 p. 9).

#### SUMMARY OF CHANGES TO THE RULE

The Board made several nonsubstantive changes to the rule in response to public comments received including comments from the Agency, the Administrative Code Division and JCAR. Those changes included deleting the reference to 40 CFR 60.675 in Section 212.445 and deleting all references to "watch" in Part 244. The Board also corrected the citation to the Standard Methods for the Examination of Water and Wastewater in Part 212. In addition, the Board corrected a citation to Section 244.168 in Appendix D and deleted the word "prohibited" in paragraph 5 of the section entitled "Yellow Alert". The Board also inserted the word "Red" in paragraph 4 of the last sentence in the section entitled "Red Alert". The Board also updated statutory citations and amended citations and the Table of Contents to conform with Administrative Code requirements.

## CONCLUSION

The Board concludes that the Agency has adequately supported its proposal and the Board will proceed to final notice and adopt the rule amending it only as indicated in this Opinion and making nonsubstantive changes requested by the Administrative Code Unit and JCAR.

ORDER

The Board directs the Clerk of the Board to cause the publication of the following in the Illinois Register as an adopted rule:

TITLE 35: ENVIRONMENTAL PROTECTION  
 SUBTITLE B: AIR POLLUTION  
 CHAPTER I: POLLUTION CONTROL BOARD  
 SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS FOR STATIONARY SOURCES

PART 212  
 VISIBLE AND PARTICULATE MATTER EMISSIONS

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 212.100 Scope and Organization  
 212.110 Measurement Methods  
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## SUBPART B: VISIBLE EMISSIONS

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 212.121 Opacity Standards  
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 212.123 Limitations for All Other Sources  
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 212.125 Determination of Violations  
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## SUBPART D: PARTICULATE MATTER EMISSIONS FROM INCINERATORS

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 212.181 Limitations for Incinerators

- 212.182 Aqueous Waste Incinerators
- 212.183 Certain Wood Waste Incinerators
- 212.184 Explosive Waste Incinerators
- 212.185 Continuous Automatic Stoking Animal Pathological Waste Incinerators

SUBPART E: PARTICULATE MATTER EMISSIONS  
FROM FUEL COMBUSTION EMISSION SOURCES

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- 212.201 Existing Sources Using Solid Fuel Exclusively Located in the Chicago Area
- 212.202 Existing Sources Using Solid Fuel Exclusively Located Outside the Chicago Area
- 212.203 Existing Controlled Sources Using Solid Fuel Exclusively
- 212.204 New Sources Using Solid Fuel Exclusively
- 212.205 Existing Coal-fired Industrial Boilers Equipped with Flue Gas Desulfurization Systems
- 212.206 Sources Using Liquid Fuel Exclusively
- 212.207 Sources Using More Than One Type of Fuel
- 212.208 Aggregation of Existing Sources
- 212.209 Village of Winnetka Generating Station

SUBPART K: FUGITIVE PARTICULATE MATTER

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- 212.301 Fugitive Particulate Matter
- 212.302 Geographical Areas of Application
- 212.304 Storage Piles
- 212.305 Conveyor Loading Operations
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- 212.307 Materials Collected by Pollution Control Equipment
- 212.308 Spraying or Choke-Feeding Required
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- 212.312 Amendment to Operating Program
- 212.313 Emission Standard for Particulate Collection Equipment
- 212.314 Exception for Excess Wind Speed
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SUBPART L: PARTICULATE MATTER EMISSIONS  
FROM PROCESS EMISSION SOURCES

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- 212.321 New Process Sources
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## SUBPART N: FOOD MANUFACTURING

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212.361 Corn Wet Milling Processes

SUBPART O: PETROLEUM REFINING, PETROCHEMICAL AND  
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Section  
212.381 Catalyst Regenerators of Fluidized Catalytic Converters

## SUBPART Q: STONE, CLAY, GLASS AND CONCRETE MANUFACTURING

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212.421 New Portland Cement Processes  
212.422 Portland Cement Manufacturing Processes  
212.423 Emission Limits for Portland Cement the Manufacturing  
Plant Located in LaSalle County, South of the Illinois  
River  
212.424 Fugitive Particulate Matter Control for the Portland  
Cement Manufacturing Plant and Associated Quarry  
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SUBPART R: PRIMARY AND FABRICATED METAL PRODUCTS AND  
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AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1991, ch. 111 1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution, Rules 202 and 203: Visual and Particulate Emission Standards and Limitations, R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R77-15, 32 PCB 403, at 3 Ill. Reg. 5, p. 798, effective February 3, 1979; amended in R78-10, 35 PCB 347, at 3 Ill. Reg. 39, p. 184, effective September 28, 1979; amended in R78-11, 35 PCB 505, at 3 Ill. Reg. 45, p. 100, effective October 26, 1979; amended in R78-9, 38 PCB 411, at 4 Ill. Reg. 24, p. 514, effective June 4, 1980; amended in R79-11, 43 PCB 481, at 5 Ill. Reg. 11590, effective October 19, 1981; codified at 7 Ill. Reg. 13591; amended in R82-1 (Docket A), 10 Ill. Reg. 12637, effective July 9, 1986; amended in R85-33 at 10 Ill. Reg. 18030, effective October 7, 1986; amended in R84-48 at 11 Ill. Reg. 691, effective December 18, 1986; amended in R84-42 at 11 Ill. Reg. 1410, effective December 30, 1986; amended in R82-1 (Docket B) at 12 Ill. Reg. 12492, effective July 13, 1988; amended in R91-6 at 15 Ill. Reg. 15708, effective October 4, 1991; amended in R89-7(B) at 15 Ill. Reg. 17710, effective November 26, 1991; amended in R91-22 at \_\_\_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_; amended in R91-35 at \_\_\_\_\_ Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

## SUBPART A: GENERAL

## Section 212.113 Incorporations by Reference

The following materials are incorporated by reference. These incorporations do not include any later amendments or editions.

- a) Ringelmann Chart, Information Circular 833 (Revision of

IC7718), Bureau of Mines, U.S. Department of Interior, May 1, 1967.

b) 40 CFR 60, Appendix A ~~(1990)~~ (1991):

- 1) Method 1: Sample and Velocity Traverses for Stationary Sources;
- 2) Method 1A: Sample and Velocity Traverses for Stationary Sources with Small Stacks or Ducts;
- 3) Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S pitot tube);
- 4) Method 2A: Direct Measurement of Gas Volume Through Pipes and Small Ducts;
- 5) Method 2C: Determination of Stack Gas Velocity and Volumetric Flow Rate in Small Stacks or Ducts (Standard Pitot Tube);
- 6) Method 2D: Measurement of Gas Volumetric Flow Rates in Small Pipes and Ducts;
- 7) Method 3: Gas Analysis for Carbon Dioxide, Oxygen, Excess Air, and Dry Molecular Weight;
- 8) Method 4: Determination of Moisture Content in Stack Gases;
- 9) Method 5: Determination of Particulate Emissions From Stationary Sources;
- 10) Method 9: Visual Determination of the Opacity of Emissions from Stationary Sources;
- 11) Method 22: Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares.

c) 40 CFR 51 Appendix M (1990):

- 1) Method 201: Determination of PM-10 Emissions;
- 2) Method 201A: Determination of PM-10 Emissions (Constant Sampling Rate Procedure).

d) 40 CFR 60.672(b), (c), (d) and (e) ~~(1990)~~ (1991).

e) 40 CFR 60.675(c) and (d) ~~(1990)~~ (1991).

f) ASAE Standard 248.2, Section 9, Basis for Stating

Drying Capacity of Batch and Continuous-Flow Grain Dryers, American Society of Agricultural Engineers, 2950 Niles Road, St. Joseph, MI 49085.

- g) U.S. Sieve Series, ASTM-E11, American Society of Testing Materials, 1916 Race Street, Philadelphia, PA 19103.
- h) 55 FR 41546, (October 12, 1990), Method 202: Determination of Condensable Particulate Emissions from Stationary Sources.
- i) Standard Methods for the Examination of Water and Wastewater, Section 209C, "Total Filtrable Residue Dried at 103 - 105°C," 15th Edition, 1980 American Public Health Association 1015 Fifteenth Street, N.W., Washington, D.C. 20005.

(Source: Amended at 16 Ill. Reg. \_\_\_\_ effective \_\_\_\_\_)

#### SUBPART Q: STONE, CLAY, GLASS AND CONCRETE MANUFACTURING

Section 212.424 Fugitive Particulate Matter Control for the Portland Cement Manufacturing Plant and Associated Quarry Operations Located in LaSalle County, South of the Illinois River.

- a) Applicability. This section shall apply to the portland cement manufacturing plant in operation before September 1, 1990 and associated quarry operations located in LaSalle County, south of the Illinois River. Associated quarry operations are those operations involving the removal and disposal of overburden, and the extraction, crushing, sizing, and transport of limestone and shale for usage at the Portland cement manufacturing plant. This Section shall not become effective until April 30, 1992.
- b) Applicability of Subpart K of this Part. This Section shall not alter the applicability of Subpart K: Fugitive Particulate Matter.
- c) Fugitive Particulate Matter Control Measures For Roadways at the Plant.
  - 1) For the unpaved access roadway to the Illinois Central Silos Loadout, the owner or operator shall spray a 30 percent solution of calcium chloride once every 16 weeks at an application rate of at least 1.58 liters per square meter (0.35 gallons per square yard) followed by weekly application of water at a rate of at least 1.58 liters per square



meter (0.35 gallons per square yard). This subsection shall not apply after the roadway is paved.

- 2) The owner or operator of the Portland cement manufacturing plant shall keep written records in accordance with subsection (e) of this Section.
- d) Fugitive Particulate Matter Control Measures for Associated Quarry Operations.
- 1) For the primary crusher, the primary screen, the #3 conveyor from the primary screen to the surge pile, and the surge pile feeders to the #4 conveyor, the owner or operator shall spray a chemical foam spray of at least 1 percent solution of chemical foaming agent in water continuously during operations at a rate of at least 1.25 liters per megagram (0.30 gallons per ton) of rock processed.
  - 2) The owner or operator shall water all roadways traveled by trucks to and from the primary crusher in the process of transporting raw limestone and shale to the crusher at an application rate of at least 0.50 liters per square meter (0.10 gallons per square yard) applied once every eight hours of operation except under conditions specified in subsection (d)(3) below. Watering shall begin within one hour of commencement of truck traffic each day.
  - 3) Subsection (d)(2) above shall be followed at all times except under the following circumstances:
    - A) Precipitation is occurring such that there are no visible emissions or if precipitation occurred during the previous 2 hours such that there are no visible emissions;
    - B) If the ambient temperature is less than or equal to 0°C (32°F); or
    - C) If ice or snow build-up has occurred on roadways such that there are no visible emissions.
  - 4) The owner or operator of the associated quarry operations shall keep written records in accordance with subsection (e) of this Section.

e) Recordkeeping and Reporting

- 1) The owner or operator of any portland cement manufacturing plant and/or associated quarry operations subject to this Section shall keep written daily records relating to the application of each of the fugitive particulate matter control measures required by this Section.
- 2) The records required under this Section shall include at least the following:
  - A) the name and address of the plant;
  - B) the name and address of the owner or operator of the plant and associated quarry operations;
  - C) a map or diagram showing the location of all fugitive particulate matter sources controlled including the location, identification, length, and width of roadways;
  - D) for each application of water or calcium chloride solution, the name and location of the roadway controlled, the water capacity of each truck, application rate of each truck, frequency of each application, width of each application, start and stop time of each application, identification of each water truck used, total quantity of water or calcium chloride used for each application, including the concentration of calcium chloride used for each application;
  - E) for application of chemical foam spray solution, the application rate and frequency of application, name of foaming agent, and total quantity of solution used each day;
  - F) name and designation of the person applying control measures; and
  - G) a log recording all failures to use control measures required by this Section with a statement explaining the reasons for each failure and, in the case of a failure to comply with the roadway watering requirements of subsection (d)(2) of this Section, a record showing that one of the circumstances for exceptions listed in subsection (d)(3) of

this Section existed during the period of the failure. Such record shall include, for example, the periods of time when the measured temperature was less than or equal to 0°C (32°F).

- 3) Copies of all records required by this Section shall be submitted to the Agency within ten (10) working days of a written request by the Agency.
- 4) The records required under this Section shall be kept and maintained for at least three (3) years and shall be available for inspection and copying by Agency representatives during working hours.
- 5) A quarterly report shall be submitted to the Agency stating the following: the dates required control measures were not implemented, the required control measures, the reasons that the control measures were not implemented, and the corrective actions taken. This report shall include those times when subsection (e d) of this Section is involved. This report shall be submitted to the Agency 30 calendar days from the end of a quarter. Quarters end March 31, June 30, September 30, and December 31.

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_  
 )

#### SUBPART R: PRIMARY AND FABRICATED METAL PRODUCTS AND MACHINERY MANUFACTURE

##### Section 212.443 ~~By-Product~~ Coke Plants

- a) Subpart B shall not apply to ~~by-product~~ coke plants.
- b) Charging:
  - 1) Uncaptured Emissions
    - A) No person shall cause or allow the emission of visible particulate matter from any coke oven charging operation, from the introduction of coal into the first charge port, as indicated by the first mechanical movement of the coal feeding mechanism on the larry car, to the replacement of the final charge port lid for more than a total of 125 seconds over 5 consecutive charges; provided however that 1 charge out of any 20 consecutive charges may be deemed an

uncountable charge at the option of the operator.

- B) Compliance with the limitation set forth in subsection (A) above shall be determined in the following manner:
- i) Observation of charging emissions shall be made from any point or points on the topside of a coke oven battery from which a qualified observer can obtain an unobstructed view of the charging operation.
  - ii) The qualified observer shall time the visible emissions with a stopwatch while observing the charging operation. Only emissions from the charge port and any part of the larry car shall be timed. The observation shall commence as soon as coal is introduced into the first charge port as indicated by the first mechanical movement of the coal feeding mechanism on the larry car and shall terminate when the last charge port lid has been replaced. Simultaneous emissions from more than one emission point shall be timed and recorded as one emission and shall not be added individually to the total time.
  - iii) The qualified observer shall determine and record the total number of seconds that charging emissions are visible during the charging of coal to the coke oven.
  - iv) For each charge observed, the qualified observer shall record the total number of seconds of visible emissions, the clock time for the initiation and completion of the charging operation and the battery identification and oven number.
  - v) The qualified observer shall not record any emissions observed after all charging port lids have been firmly seated following removal of the larry car, such as emissions occurring when a lid has been temporarily removed to permit spilled coal to be swept into the

oven.

- vi) In the event that observations from a charge are interrupted the data from the charge shall be invalidated and the qualified observer shall note on his/her observation sheet the reason for invalidating the data. The qualified observer shall then resume observation of the next consecutive charge or charges and continue until a set of five charges has been recorded. Charges immediately preceding and following interrupted observations shall be considered consecutive.

2) Emissions from Control Equipment

- A) Emissions of particulate matter from control equipment used to capture emissions during charging shall not exceed 0.046 gm/dscm (0.020 gr/dscf). Compliance shall be determined in accordance with the procedures set forth in 40 CFR 60, Appendix A, Methods 1-5 ~~as regulations promulgated by the U.S. Environmental Protection Agency under Section 111 of the Clean Air Act (42 USC 7411) as amended~~ incorporated by reference in Section 212.113. THE PROVISIONS OF SECTION 111 OF THE CLEAN AIR ACT . . . RELATING TO STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES . . . ARE APPLICABLE IN THIS STATE AND ARE ENFORCEABLE UNDER (THE ENVIRONMENTAL PROTECTION ACT). (ILL. REV. STAT. 1991, CH. 111-1/2, PAR. 1009.1(b)).
- B) The opacity of emissions from control equipment shall not exceed an average of 20%, averaging the total number of readings taken. Opacity readings shall be taken at 15-second intervals from the introduction of coal into the first charge port as indicated by the first mechanical movement of the coal feeding mechanism on the larry car to the replacement of the final charge port lid. Compliance, except for the number of readings required, shall be determined in accordance with 40 CFR 60, Appendix A, Method 9, ~~as regulations promulgated by the U.S. Environmental Protection Agency under Section 111 of the Clean Air Act (42 USC 7411), as amended~~ incorporated by reference in Section 212.113.

THE PROVISIONS OF SECTION 111 OF THE CLEAN AIR ACT . . . RELATING TO STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES . . . ARE APPLICABLE IN THIS STATE AND ARE ENFORCEABLE UNDER (THE ENVIRONMENTAL PROTECTION ACT). ~~{ILL. REV. STAT., CH. 111-1/2, PAR. 1009.1(b)}~~ Section 9.1(b) of the Act.

- c) Opacity readings of emissions from control equipment shall be taken concurrently with observations of fugitive particulate matter. Two qualified observers shall be required.

- 3) Qualified observers referenced in subsection (b) of this Section shall be certified pursuant to 40 CFR 60, Appendix A, Method 9, as regulations promulgated by the U.S. Environmental Protection Agency under Section 111 of the Clean Air Act (42 USC 7411), as amended incorporated by reference in Section 212.113. THE PROVISIONS OF SECTION 111 OF THE CLEAN AIR ACT . . . RELATING TO STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES . . . ARE APPLICABLE IN THIS STATE AND ARE ENFORCEABLE UNDER (THE ENVIRONMENTAL PROTECTION ACT). ~~{ILL. REV. STAT., CH. 111-1/2, PAR. 1009.1(b)}~~ Section 9.1(b) of the Act.

c) Pushing:

1) Uncaptured Emissions

- A) Emissions of fugitive particulate matter from pushing operations shall not exceed an average of 20% opacity for 4 consecutive pushes considering the highest average of six consecutive readings in each push. Opacity readings shall be taken at 15-second intervals, beginning from the time the coke falls into the receiving car or is first visible as it emerges from the coke guide whichever occurs earlier, until the receiving car enters the quench tower or quenching device. For a push of less than 90 seconds duration, the actual number of 15-second readings shall be averaged.
- B) Opacity readings shall be taken by a qualified observer located in a position where the oven being pushed, the coke receiving car and the path to the quench

tower are visible. The opacity shall be read as the emissions rise and clear the top of the coke battery gas mains. The qualified observer shall record opacity readings of emissions originating at the receiving car and associated equipment and the coke oven, including the standpipe on the coke side of the oven being pushed. Opacity readings shall be taken in accordance with the procedures set forth in 40 CFR 60, Appendix A, Method 9, except that Section 2.5 for data reduction shall not be used. The qualified observer referenced in this subsection shall be certified pursuant to 40 CFR 60, Appendix A, Method 9, ~~as regulations promulgated by the U.S. Environmental Protection Agency under Section 111 of the Clean Air Act (42 USC 7411), as amended incorporated by reference in Section 212.113.~~ THE PROVISIONS OF SECTION 111 OF THE CLEAN AIR ACT . . . RELATING TO STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES . . . ARE APPLICABLE IN THIS STATE AND ARE ENFORCEABLE UNDER [THE ENVIRONMENTAL PROTECTION ACT]. ~~(ILL. REV. STAT., CH. 111 1/2, PAR. 1009.1(b))~~ Section 9.1(b).

2) Emissions from Control Equipment

- A) The particulate emissions from control equipment used to control emissions during pushing operations shall not exceed 0.040 pounds per ton of coke pushed. Compliance shall be determined in accordance with the procedures set forth in 40 CFR 60, Appendix A, Methods 1-5, ~~as regulations promulgated by the U.S. Environmental Protection Agency under Section 111 of the Clean Air Act (42 USC 7411), as amended incorporated by reference in Section 212.113.~~ THE PROVISIONS OF SECTION 111 OF THE CLEAN AIR ACT . . . RELATING TO STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES . . . ARE APPLICABLE IN THIS STATE AND ARE ENFORCEABLE UNDER [THE ENVIRONMENTAL PROTECTION ACT]. ~~(ILL. REV. STAT., CH. 111 1/2, PAR. 1009.1(b))~~ Section 9.1(b) of the Act. Compliance shall be based on an arithmetic average of three runs (stack tests) and the calculations shall be based on the duration of a push as defined in subsection (c)(1)(A) of this Section.

- B) The opacity of emissions from control equipment used to control emissions during pushing operations shall not exceed 20%. For a push of less than six minutes duration, the actual number of 15-second readings taken shall be averaged. Compliance shall be determined in accordance with 40 CFR 60, Appendix A, Method 9, ~~as regulations promulgated by the U.S. Environmental Protection Agency under Section 111 of the Clean Air Act (42 USC 7411), as amended incorporated by reference in Section 212.113.~~ THE PROVISIONS OF SECTION 111 OF THE CLEAN AIR ACT . . . RELATING TO STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES . . . ARE APPLICABLE IN THIS STATE AND ARE ENFORCEABLE UNDER [THE ENVIRONMENTAL PROTECTION ACT]. ~~{ILL. REV. STAT., CH. 111 1/2, PAR. 1009.1(b)}~~ Section 9.1(b) of the Act. Section 2.5 of 40 CFR 60, Appendix A, Method 9 for data reduction shall not be used for pushes of less than six minutes duration.
- d) Coke Oven Doors:
- 1) No person shall cause or allow visible emissions from more than 10% of all coke oven doors at any time. Compliance shall be determined by a one pass observation of all coke oven doors on any one battery.
  - 2) No person shall cause or allow the operation of a coke oven unless there is on the plant premises at all times an adequate inventory of spare coke oven doors and seals and unless there is a readily available coke oven door repair facility.
- e) Coke Oven Lids: No person shall cause or allow visible emission from more than 5% of all coke oven lids at any time. Compliance shall be determined by a one pass observation of all coke oven lids.
- f) Coke Oven Offtake Piping: No person shall cause or allow visible emissions from more than 10% of all coke oven offtake piping at any time. Compliance shall be determined by a one pass observation of all coke oven offtake piping.
- g) Coke Oven Combustion Stack: No person shall cause or allow the emission of particulate matter from a coke oven combustion stack to exceed 110 mg/dscm (0.05 gr/dscf).



## h) Quenching

- 1) All coke oven quench towers shall be equipped with grit arrestors or equipment of comparable effectiveness. Baffles shall cover 95% or more of the cross sectional area of the exhaust vent or stack and must be maintained. The Quench make-up water shall not directly include untreated coke by-product plant effluent. All water placed on the coke being quenched shall be quench water.
  - 2) Total dissolved solids concentrations in the quench ~~make-up~~ water shall not exceed a weekly average of 1200 1500 mg/l. Provided however that the limitations on the quality of quench make-up water shall not apply where the operator employs an equivalent method of control as determined by the Agency.
  - 3) The quench water shall be sampled for total dissolved solids concentrations in accordance with the methods specified in Standard Methods for the Examination of Water and Wastewater, Section 209C, "Total Filtrable Residue Dried at 103 - 105°C" 15th Edition, 1980, incorporated by reference in Section 212.113. Analyses shall be performed on grab samples of the quench water as applied to the coke. Samples shall be collected a minimum of five days per week per quench tower and analyzed to report a weekly concentration. The samples for each week shall be analyzed either:
    - i) separately, with the average of the individual daily concentrations determined;  
or
    - ii) as one composite sample, with equal volumes of the individual daily samples combined to form the composite sample,
  - 4) The records required under this subsection shall be kept and maintained for at least three (3) years and upon prior notice shall be available for inspection and copying by Agency representatives during work hours.
- i) Work Rules: No person shall cause or allow the operation of a by-product coke plant except in accordance with operating and maintenance work rules approved by the Agency.

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## Section 212.445 Blast Furnace Cast Houses

a) Uncaptured Emissions

- 1) Emissions of fugitive particulate matter from any opening in a blast furnace cast house shall not exceed 20% opacity on a 6-minute rolling average basis beginning from initiation of the opening of the tap hole up to the point where the iron and slag stops flowing in the trough.
- 2) Opacity readings shall be taken in accordance with the observation procedures set out in 40 CFR Part 60, Appendix A, Method 9, (1991), incorporated by reference in Section 212.113.

b) Emissions from Control Equipment

- 1) Particulate emissions from control equipment used to collect any of the emissions from the tap hole, trough, iron or slag runners or iron or slag spouts shall not exceed 0.023 g/dscm (0.010 gr/dscf). Compliance shall be determined in accordance with the procedures set out in 40 CFR 60, Appendix A, Methods 1-5 (1991), incorporated by reference in Section 212.113, and shall be based on the arithmetic average of three runs. Calculations shall be based on the duration of a cast defined in subsection (a)(1) above.
- 2) The opacity of emissions from control equipment used to collect any of the emissions from the tap hole, trough, iron or slag runners or iron or slag spouts shall not exceed 10% on a 6-minute rolling average basis. Opacity readings shall be taken in accordance with the observation procedures set out in 40 CFR Part 60, Appendix A, Method 9, (1991), incorporated by reference in Section 212.113.

~~a) Particulate matter emissions from the blast furnace casting operation into the ambient air shall not exceed the allowable emission rate specified in Section 212.321, calculated and measured as follows:~~

- ~~1) For purposes of this rule, the casting operation for each furnace shall be considered as a separate operation and the process weight ("P") in the calculation shall be the total weight of the iron and slag entering the cast house during the casting operation.~~
- ~~2) Measurement method.~~

- A) ~~Application. This test procedure shall be used to determine compliance with this subsection (a), Blast Furnace Cast Houses. If the United States Environmental Protection Agency (USEPA) adopts a test procedure to sample particulate emissions from blast furnace cast houses, that test procedure may be substituted for the one specified in this paragraph upon publication in the Federal Register.~~
- B) ~~Measurement Equipment for this Test Procedure. The measurement equipment used for this test procedure shall consist of the following:~~
- ~~i) High Volume Air Samplers with 0.3 micron glass fiber filters shall be used for the determination of cast house particulate emission concentrations.~~
  - ~~ii) Velocity measurements shall be determined by the use of a suitable instrument designed for the accurate determination of velocities within the range encountered during the sampling duration.~~
  - ~~iii) Temperature measurements shall be determined by the use of a suitable instrument designed for the accurate determination of temperature within the range encountered during the sampling duration.~~
- C) ~~Test Procedure.~~
- ~~i) Sampling Time Duration: Sampling and opacity observations will initiate with the opening of the tap hole and terminate with the plugging of the tap hole.~~
  - ~~ii) Opacity Observations: Opacity observations of the cast house roof monitor particulate emissions into the atmosphere shall be performed during the test runs by use of the USEPA Method 9 Procedure (40 CFR 60, Appendix A, Method 9, 42 Fed. Reg. 41754 (August 18, 1977)).~~

- ~~iii) Number of Test Runs: The average of six complete sampling runs during normal operating conditions will be the minimum required to determine compliance with this subsection (a).~~
- ~~iv) Sampled Emission: During the test period, particulate emissions from the casting operation shall be directed into the cast house to the extent feasible and shall not create an unsafe or hazardous condition. Those emissions in and/or directed to the cast house shall be allowed to escape only at sampling area locations. Compliance with this requirement shall be determined by an agency-certified observer, and any significant visible emission from the cast house any place other than a sampling location will invalidate the test.~~
- ~~v) Sampler Locations: Samplers shall be located as close as practicable to the discharge point of the cast house emissions to the atmosphere and shall be oriented in the direction of the air flow. The sampler grid pattern shall be divided up such that the cross sectional area per sampler shall not exceed 9.29 square meters (100 square feet). If necessary to insure representative samples, the Agency may specify an area of less than 9.29 square meters (100 square feet). Each sampler shall be located at the approximate center of each sampling area. The concentration of particulate matter as determined by each sampler shall be considered as the concentration for each respective area.~~
- ~~vi) Velocity Measurement Locations: Velocity measurements shall be made as close as possible to each sampling point location without interfering with the measurement. The average velocity measured at each sampling point for the entire sample run shall be used as the average velocity for each entire sampler area respectively.~~

- vii) ~~Temperature Measurement Locations: The same as velocity measurement locations.~~
- viii) ~~Emission Exhaust Pressure Measurements: This pressure shall be considered the barometric pressure as measured at the east house floor.~~
- ix) ~~Recording of Operating Parameters: The following information shall be recorded for those casts tested: material charge weights to the blast furnace for the operating turn during which east house tests are performed; east weights, total weight of iron plus slag entering the east house during each casting operation sampled; all information contained in blast furnace casting logs or other similar records, size of the tap hole drill bit used for each cast and the length of the tap hole for each previous east.~~
- D) ~~Calculations. Mass Emission Rate (lbs/hr): The mass emission rate (lbs/hr) for each test run shall consist of the sum of the mass emissions as determined per each sample area. Should the sample time duration be greater than one hour, the ratio calculated for one hour divided by the sample time duration (hours) shall be multiplied by the sum of the mass emissions to obtain the pounds per hour rate.~~
- b) ~~Provided, however, that subsection (a) above shall not apply at the option of the operator if the operator has installed and is operating and maintaining collection equipment designed to collect a minimum of fifty percent (50%) of particulate matter emissions from the tap hole, the trough to the skimmers and the iron spouts. Such emissions shall be evacuated to pollution control equipment. Emissions from said pollution control equipment shall not exceed 46 mg/dsem (0.02 gr/dsef).~~

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

TITLE 35: ENVIRONMENTAL PROTECTION  
 SUBTITLE B: AIR POLLUTION  
 CHAPTER I: POLLUTION CONTROL BOARD  
 SUBCHAPTER 1: AIR QUALITY STANDARDS AND EPISODES

PART 243  
 AIR QUALITY STANDARDS

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243.Appendix A Rule into Section Table  
243.Appendix B Section into Rule Table  
243.Appendix C Past Compliance Dates

AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1991, ch. 111 1/2, pars. 1010 and 1027).

SOURCE: Adopted as Chapter 2: Air Pollution, Part III: Air Quality Standards, in R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R80-11, 46 PCB 125, at 6 Ill. Reg. 5804, effective April 22, 1982; amended in R82-12, at 7 Ill. Reg. 9906, effective August 18, 1983; codified at 7 Ill. Reg. 13630; amended in R91-35 at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_

SUBPART A: GENERAL PROVISIONS

Section 243.108      Incorporations by Reference

The following materials are incorporated by reference. These

incorporations do not include any later amendments or editions:

- a) ~~High volume sampler method, 40 CFR 50, Appendix B (1982), 36 Fed. Reg. 22388, November 25, 1971.~~
- ab) Pararosaniline method, 40 CFR 50, Appendix A (1982).
- be) (Non-dispersive infrared spectrometry technique, 40 CFR 50, Appendix C (1982), 36 Fed. Reg. 22391, November 25, 1971.
- cd) Colorimetric method, 36 Fed. Reg. 22396, November 25, 1971.
- de) Ozone-ethylene reaction method, 40 CFR 50, Appendix D (1982), 36 Fed. Reg. 22392, November 25, 1971.
- ef) Lead 40 CFR 50, Appendix G (1982), 43 Fed. Reg. 46258, October 5, 1978, as amended at 44 Fed. Reg. 37915, June 29, 1979; 46 Fed. Reg. 44163, September 3, 1981.
- f) Reference method for the determination of particulate matter as PM-10 in the atmosphere, 40 CFR 50, Appendix J (1990)
- g) Interpretation of the national ambient air quality standards for particulate matter, 40 CFR 50, Appendix K (1990)

(Source: Amended at 16 Ill. Reg. \_\_\_\_, effective \_\_\_\_)

#### SUBPART B: STANDARDS AND MEASUREMENT METHODS

##### Section 243.120      PM-10

- a) Standards. The ambient air quality standards for PM-10 are:
  - 1) An annual arithmetic mean concentration of 50 micrograms per cubic meter; and
  - 2) A maximum 24-hour concentration of 150 micrograms per cubic meter, not to be exceeded more than once per year.
- b) Measurement Method. For determining conformance with the PM-10 ambient air quality standards, PM-10 shall be measured by the method described in 40 CFR 50, Appendix J (incorporated by reference in Section 243.108). The computations necessary for analyzing particulate matter data to determine attainment of the PM-10 standards are

described in 40 CFR 50, Appendix K (incorporated by reference in Section 243.108).

(Source: Added at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

~~Section 243.121~~      ~~Particulates~~

- ~~a) Primary Standards. The primary ambient air quality standards for particulate matter are:~~
  - ~~1) An annual geometric mean concentration of 75 micrograms per cubic meter; and,~~
  - ~~2) A maximum 24-hour concentration not to be exceeded more than once per year of 260 micrograms per cubic meter.~~
- ~~b) Secondary Standards. The secondary ambient air quality standards for particulate matter are:~~
  - ~~1) An annual geometric mean concentration of 60 micrograms per cubic meter; and,~~
  - ~~2) A maximum 24-hour concentration not to be exceeded more than once per year of 150 micrograms per cubic meter.~~
- ~~c) Measurement Method. For determining conformance with particulate air quality standards, particulate matter shall be measured by the high volume sampler method as described in 40 CFR 50, Appendix B (1982), 36 Fed. Reg. 22388, November 25, 1971, or by an equivalent method approved by the Agency.~~

(Source: Repealed at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

TITLE 35: ENVIRONMENTAL PROTECTION  
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PART 244  
 EPISODES

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#### SUBPART B: LOCAL AGENCY RESPONSIBILITIES

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##### Section

- 244.141 Requirement for Plans
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#### SUBPART D: EPISODE STAGES

##### Section

- 244.161 ~~Watch~~Advisory, Alert and Emergency Levels
- 244.162 Criteria for Declaring an Advisory or Watch
- 244.163 Criteria for Declaring a Yellow Alert
- 244.164 Criteria for Declaring a Red Alert
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- 244.169 Actions During Episode Stages

244.Appendix A Rule into Section Table

244.Appendix B Section into Rule Table

244.Appendix C Past Compliance Dates

244.Appendix D Required Emission Reduction Actions

AUTHORITY: Implementing Section 10 and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1991, ch. 111 1/2, pars. 1010 and 1027).

SOURCE: Adopted as Rules 102 through 114, in R70-7, 1 PCB 101, filed and effective December 8, 1970; renumbered as Chapter 2: Air Pollution, Part IV: Episodes, in R72-6, 5 PCB 183, filed and effective August 18, 1972; amended in R80-11, 45 PCB 577, at 6 Ill. Reg. 5804, effective April 22, 1982; codified at 7 Ill. Reg. 13632; amended in R91-35 at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

## SUBPART A: DEFINITIONS AND GENERAL PROVISIONS

## Section 244.101 Definitions

All terms which appear in this Part have the definitions specified by this Part and 35 Ill. Adm. Code 201 and 211.

"Air Stagnation Advisory": a special bulletin issued by the National Weather Service entitled "Air Stagnation Advisory," which is used to warn air pollution control agencies that stagnant atmospheric conditions are expected which could cause increased concentrations of air contaminants near the ground.

"btu": British thermal unit.

~~"COH": Coefficient of Haze (per 1,000 linear feet). Particulate matter as measured by the automatic paper tape sampler method and reported as COH's. When particulate matter is recorded on a weight per unit volume basis, the conversion 1 COH equals 125 micrograms per cubic meter shall be employed.~~

"Episode": the period of time at a location in which an air pollution ~~watch~~ advisory, yellow alert, red alert or emergency has been declared.

"Fleet Vehicle": any one of three or more vehicles operated for the transportation of persons or property in the furtherance of any commercial or industrial enterprise, for-hire or not-for-hire.

"Indirect Source": any building, facility, plant, auditorium or other structure or combination thereof, or any street, road, or highway or airport, which causes or contributes to air pollution through the attraction of mobile air pollution emission sources.

~~"Level": the magnitude of pollution (expressed as a~~  
Average concentration, COH or product) of an air  
contaminant during a specified time period.

"Low Sulfur Fuel": any fuel containing 1.0% or less sulfur by weight.

"Parking Lots": parking lots shall include all lots, areas, buildings or facilities or portions of lots, areas, buildings or facilities whose primary purpose is for the temporary parking of motor vehicles.

~~"Product": the arithmetic product of the average sulfur dioxide concentration in parts per million (ppm)~~

~~during a specified time period and the average particulate concentration in COH's during that same specified time period.~~

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 244.106 Monitoring

- a) Monitoring stations used to determine advisory, ~~watch~~, alert or emergency levels shall be located according to Federal guidelines for establishment of air quality surveillance networks and shall use measurement methods or equivalent methods as officially authorized by the United States Environmental Protection Agency (USEPA).
- b) Whenever any monitoring station registers air contaminant concentrations in excess of ~~watch~~ advisory or alert levels, proper operation of the sampling equipment at such stations shall be verified by the Agency or ~~local~~ any agency cooperating with the Agency before the concentrations are used to declare any advisory, ~~watch~~, alert or emergency stage.

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 244.107 Determination of Areas Affected

- a) An advisory ~~or watch~~ shall be declared for the entire Illinois portion of any Air Quality Control Region if any part of such region meets the advisory ~~or watch~~ criteria. When atmospheric conditions and contaminant emissions in a region are such as to cause the advisory ~~or watch~~ criteria to be met in another region, an advisory ~~or watch~~ shall be declared for any Illinois portion of both regions.
- b) An alert or emergency shall be declared for only those portions of an advisory ~~or watch~~ area which meet the applicable criteria of Subpart D of this Part or cause such criteria to be met elsewhere in Illinois or in another state. When such criteria have been met, sectors of the advisory ~~or watch~~ area requiring alert or emergency actions shall be defined depending upon expected atmospheric conditions, contaminant emissions and dispersion analyses. Alerts or emergencies shall then be declared for one or more of these sectors.

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART B: LOCAL AGENCY RESPONSIBILITIES

## Section 244.121 Local Agency Responsibilities

Local air pollution control agencies shall cooperate with the Agency in monitoring, surveillance and enforcement activities to the extent of their capabilities during any air pollution episode. This cooperation shall meet the following specific conditions:

- a) Operation of Monitoring Equipment. At any time other than during an episode, local agencies with real-time monitoring equipment shall operate all such monitoring equipment at a minimum level necessary to determine whether any level of air contaminants specified in this Part has been reached.
- b) Reporting Levels to Agency. Such local agencies shall report to the Agency ~~Emergency Action Center~~ within thirty (30) minutes by either telephone or telemetry when any advisory, ~~watch~~, alert or emergency level specified in this Part has been reached as indicated on their air monitoring equipment.
- c) Operation of Telemetry Equipment. Local agencies with air contaminant sampling networks connected by telemetry with the headquarters of the Agency shall conduct their operations in such a manner as to provide valid data to the Agency.
- d) Agency Representatives at Local Agency Control Centers. In regions where local agencies are participating with the Agency in episode control activities, one or more Agency representatives may station themselves at the control center of the local agency during an air pollution episode. The Agency representatives shall have authority to cause data to be transmitted by telephone or other rapid form of communication to Agency headquarters and after consultation with said local agency to require the initiation, alteration or termination of control strategy by persons required to take action under this Part as directed by the Director.
- e) Local Agency Episode Operations Plan. Local agencies participating with the Agency in episode control activities shall file for approval with the Agency an episode operations plan which describes procedures for obtaining and processing episode action plans, monitoring air contaminant levels during routine and episode operations, alerting the public, governmental officials, emission sources and other interested parties of episode stages, and performing surveillance and enforcement activities during episodes.

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART D: EPISODE STAGES

##### Section 244.161 ~~Watch~~, Advisory, Alert and Emergency Levels:

Pollutant	Averaging Time	<del>Advisory</del>	<del>Watch</del>	Yellow Alert	Red Alert	
Emergency						
Sulfur dioxide (ppm)	2-hour	<u>0.30</u>	<del>0.30</del>	--	--	--
	4-hour	--		0.30	0.35	0.40
Particulate Matter (COH)	2-hour	<u>420</u>	<del>5.0</del>	--	--	--
	24-hour	--		<del>3.0</del>	<del>5.0</del>	<del>7.0</del>
<u>PM<sub>10</sub></u> ( <u>ug/m<sup>3</sup></u> )				<u>350</u>	<u>420</u>	<u>500</u>
<del>Product (sulfur dioxide</del>	<del>2-hour</del>		<del>1.0</del>			
<del>x particulate matter)</del>	<del>4-hour</del>			<del>1.0</del>	<del>2.0</del>	<del>2.4</del>
	<del>24-hour</del>			<del>0.20</del>	<del>0.30</del>	<del>1.20</del>
Carbon Monoxide (ppm)	2-hour	<u>30</u>	<del>30</del>	--	--	--
	8-hour	--		15	30	40
Ozone (ppm)	<del>2-hour</del>	<del>0.12</del>				
	1-hour	<u>0.12</u>		0.20	0.30	0.50
Nitrogen dioxide (ppm)	2-hour	<u>0.40</u>	<del>0.40</del>	--	--	--
	1-hour	--		0.60	1.20	1.60
	24-hour	--		0.15	0.30	0.40

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

##### Section 244.162 Criteria for Declaring an Advisory ~~or Watch~~

The Director or his/her designated representative shall declare an air pollution ~~watch or, in the case of ozone, an advisory~~ whenever:

- An air stagnation advisory is received for any area within the State; or
- Any advisory ~~watch~~ or yellow alert level is equaled or exceeded at any monitoring station; and

- c) Atmospheric conditions, or expected contaminant emissions, are such that concentrations can reasonably be expected to remain at or above the ~~watch~~ advisory or yellow alert level for 24 or more hours; or
- d) For ozone, atmospheric conditions, or expected contaminant emissions, are such that concentrations can reasonably be expected to reoccur at any advisory, or yellow alert, level on the following calendar day.

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 244.163 Criteria for Declaring a Yellow Alert

The Director or his/her designated representative shall declare a yellow alert whenever:

- a) Any yellow alert level is equaled or exceeded at any monitoring station; and
- b) An air pollution advisory ~~or watch~~ has been in effect for 4 hours in the area for which the yellow alert is to be declared; and
- c) Atmospheric conditions, or expected contaminant emissions, are such that concentrations can reasonably be expected to remain at or above the yellow alert level for 12 or more hours; or
- d) For ozone, atmospheric conditions, or expected contaminant emissions, are such that concentrations can reasonably be expected to reoccur at a yellow alert level on the following calendar day.

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 244.166 Criteria for Terminating ~~Watch~~ Advisory, Alert and Emergency

The Director or his/her designated representative shall terminate any ~~watch~~ advisory, alert or emergency stage when the applicable level specified in Section 244.161 no longer prevails and when in his/her judgment atmospheric conditions and expected contaminant emissions are such as to warrant discontinuance or lowering of that ~~watch~~ advisory, alert or emergency stage.

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 244.167 Episode Stage Notification

Whenever an advisory, ~~a watch~~, an alert or an emergency stage is declared or terminated, the Agency or local agency designated by the Agency shall notify:

- a) Concerned personnel of the Agency and of federal, local and other State agencies;
- b) Facilities required to make preparations or take actions of major emission reducing consequence;
- c) The public by radio, television and other means of rapid communication.

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 244.168 Contents of Episode Stage Notification

Notifications shall contain: time and date of issuance, the names of agencies or persons responsible for issuance and the beginning and expected ending time of any ~~watch~~ advisory, alert or emergency stage. ~~Alert and emergency~~ Notifications shall also contain details about the pollutant(s) for which notification is made, such as maximum pollutant levels reached and predicted, geographical areas affected, specific pollution-reducing instructions to the public and to direct or indirect sources of air contaminants, as well as advice to persons who may be affected by the elevated pollution levels.

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 244.169 Actions During Episode Stages

- a) ~~Watch and~~ Advisory Actions.

When an air pollution advisory ~~or watch~~ is in effect, the Agency and ~~local~~ other agencies designated by the Agency shall:

- 1) Coordinate their activities and place their operational staffs in a state of increased readiness except that in the event of an ozone advisory the Agency need not monitor on a 24 hour basis.
- 2) Promptly verify the operation of their air monitoring instrument networks and monitor data from such instrument networks during all periods when there is reasonable likelihood of yellow alert levels occurring.
- 3) Evaluate atmospheric conditions and contaminant

emissions data and monitor changes in such conditions and data during all periods when there is reasonable likelihood of yellow alert levels occurring.

- b) Yellow Alert, Red Alert and Emergency Actions. When a yellow alert, red alert or emergency is in effect, personnel of the Agency, local agencies designated by the Agency, direct and indirect emission sources and such other persons as are required to take actions according to this Part shall take all actions required of them in Appendix D, of this Part insofar as such actions are applicable to the declared episode stage and contaminant ~~or product~~ for which the episode stage has been declared.
- 1) Actions by local agencies designated by the Agency shall be in accordance with their episode operations plan if such plan has been approved by the Agency.
  - 2) Actions by direct or indirect sources of emissions shall be in accordance with their episode action plan if such plan has been approved by the Agency.

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 244. Appendix D	Required Emission Reduction Actions** <sup>2</sup> Sulfur Dioxide, <del>Particulate</del> , <u>PM-10</u> , <del>Product</del> , Nitrogen Dioxide, and Carbon Monoxide
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#### YELLOW ALERT

- 1) The Agency shall notify the public by radio and/or television that a Yellow Alert is in effect; that the public is required to take action in accordance with these regulations; that the public is requested to avoid the unnecessary use of automobiles and of electricity; and that persons suffering from respiratory or heart conditions should take appropriate precautions.
- 2) Electric power generating stations shall effect the maximum feasible reduction of emissions by utilizing

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<sup>2</sup> During each stage only those actions which cause a reduction of emissions of contaminants for which such stage has been declared are required. cf. 35 Ill. Adm. Code 244.102 through 244.109, and 244.168.



fuels which have low ash content and less than 1.0% sulfur by weight (1.5% in the case of fuel oil), provided, however, that emission from such stations shall not exceed the applicable emission standards and limitations of 35 Ill. Adm. Code 214; by limiting soot blowing and boiler lancing, where essential, to periods of maximum atmospheric turbulence; by diverting power generation to stations outside the area for which the Alert is in effect; or by any other means approved by the Agency. Such actions will be in accordance with the Yellow Alert Plan if such plan has been approved for that station.

- 3) Facilities having fuel combustion emission sources with a total rated capacity in excess of 10 million btu/hr and burning coal and/or fuel oil shall reduce emissions by utilizing fuels which have low ash content and less than 1.0% sulfur weight (1.5% in the case of fuel oil) provided, however, that emissions from such facilities shall not exceed the applicable emission standards and limitations of 35 Ill. Adm. Code 214; by limiting soot blowing and boiler lancing, where essential, to periods of high atmospheric turbulence; or by any other means approved by the Agency. If fuels of low ash and sulfur content are not available, such facilities with the exemption of residences, hospitals, and other essential facilities as designated by the Agency, shall curtail fuel burning to the maximum degree consistent with avoiding injury to persons or severe damage to property. Such actions will be in accordance with the Yellow Alert Plan if such plan has been approved for that facility.
- 4) Facilities engaged in manufacturing required to submit Yellow Alert plans shall curtail or defer production and allied operations to the extent necessary to avoid emissions in excess of those which would be discharged if the facility were operated in accord with the limitations prescribed by the regulations limiting emissions, insofar as such reductions can be achieved without creating injury to persons or severe damage to property.

Such reductions shall be made notwithstanding any variance or program of delayed compliance with the regulations, and shall be in accord with the Yellow Alert plan if such plan has been approved for that facility.

- 5) All open burning and all incineration except as provided below are ~~provided~~ prohibited. Certain burning of explosive or pathological wastes may be exempted from this restriction by the Agency in

writing upon specific written application.

- 6) Incinerators meeting the emission standards and limitations of this Chapter may be operated only during the hours of maximum atmospheric turbulence as designated by the Agency.

#### RED ALERT

- 1) All actions required during the Yellow Alert shall be continued.
- 2) The Agency shall notify the public by radio and/or television that a Red Alert is in effect; that the public is required to take action in accordance with these regulations; that the public is requested to avoid the unnecessary use of automobiles and of electricity; and that persons suffering from respiratory or heart conditions should take appropriate precautions.
- 3) All incineration and all open burning are prohibited. Certain burning of explosive or pathological wastes may be exempted from these restrictions by the Agency in writing upon specific written application.
- 4) Facilities engaged in manufacturing and required to submit Red Alert Plans shall curtail any production, including the generation of process steam, which emits contaminants into the atmosphere, to the greatest extent possible without causing injury to persons or severe damage to equipment. Such action shall be in accordance with the Red Alert Plan if such plan has been approved for that facility.

#### EMERGENCY

- 1) All actions required during the Yellow Alert and Red Alert shall be continued.
- 2) The unnecessary use of electricity, such as for decorative or amusement purposes, is prohibited.
- 3) The use of motor vehicles is prohibited except for essential uses such as police, fire, and health services, delivery of food or essential fuel, waste collection, utility or pollution control emergency repairs, and such comparable uses as may be designated by authorized Highway and Law Enforcement Officials in accordance with the Illinois Emergency Highway Traffic Regulations Plan.

- 4) All aircraft flights leaving the area of the Emergency are forbidden except for reasons of public health or safety as approved by the Agency in advance.
- 5) Buildings shall be ~~maintained at~~ heated to temperatures no greater than 65°F except for hospitals and for other buildings approved by the Agency for reasons of health or severe damage to property.
- 6) All manufacturing activities shall be curtailed to the greatest extent possible without causing injury to persons or severe damage to equipment.
- 7) All facilities or activities listed below shall immediately cease operations:

Mining and quarrying, contract construction work, and wholesale trade establishments.

Schools, except elementary schools which shall close at the end of the normal school day and not re-open until the Emergency is terminated.

Government agencies except those needed to administer air pollution alert programs and other essential agencies determined by Agency to be vital for public safety and welfare.

Retail trade stores except those dealing primarily in the sale of food or pharmacies.

Real estate agencies, insurance offices and similar business.

Laundries, cleaners and dryers, beauty and barber shops and photographic studios.

Amusement and recreational service establishments such as motion picture theaters.

Automobile repair and automobile service garages.

Advertising offices, consumer credit reporting, adjustment and collecting agencies, printing and duplicating services, rental agencies, and commercial testing laboratories.

#### REQUIRED EMISSION REDUCTION ACTIONS - OZONE -

#### 1. GENERAL

Yellow Alert - All Advisory Actions continue.  
Government officials, public and submitters of Action Plans notified.

Red Alert - All Advisory and Yellow Alert actions continue.  
Government officials, public, and submitters of Action Plans notified.

Emergency - All Advisory, Yellow Alert, and Red Alert actions continue.  
Government officials, public, and submitters of Actions Plans notified.

2. VEHICLES PARKING LOTS ROAD REPAIRS

Yellow Alert - Public requested to avoid the unnecessary use of automobiles.

Red Alert - Fleet vehicles, other than mass transit vehicles and vehicles used for the delivery of grocery and pharmaceutical products, essential fuel, for emergency medical services and for such comparable uses as designated by the Agency, immediately curtail operations to the greatest extent possible in or into the area affected by the Red Alert and cease operations on the second calendar day of the Alert.

Parking lots for more than 200 vehicles, except for lots predominately serving residences, grocery stores, medical facilities, rail, bus and air transportation terminals, lots provided by employers primarily for employees, and comparable lots as designated by the Agency shall immediately curtail operations and close on the second calendar day of the Alert.

Road repair and maintenance not necessary for immediate safety and which, if suspended, will expedite the flow of vehicular traffic is prohibited.

Emergency - Motor vehicle operation in or into the area affected by the Emergency is prohibited except for essential uses such as police, fire, and health services, and comparable uses designated by the Illinois Emergency Highway Traffic Regulation Plan. All aircraft flights leaving the area of the Emergency are forbidden except for reasons of public health or safety.

3. MANUFACTURING AND OTHER FACILITIES HAVING PROCESS EMISSION SOURCES

Yellow Alert - Facilities engaged in manufacturing review

operations and Action Plans, inspect emission control devices, determine areas of delayable operations; and from such steps revise operations so as to cause greatest feasible reduction in emissions short of adversely affecting normal production.

Red Alert - All facilities with process or fuel combustion emission sources emitting a total of more than 100 tons per year or 550 pounds per operating day of organic material or of nitrogen oxides, and all other facilities not in compliance with the organic material and nitrogen oxides emissions standards of Part 2 of this Chapter, curtail all such sources to the greatest extent possible short of causing injury to persons, severe damage to equipment, or an increase in emissions.

Emergency - All operations curtailed to the greatest extent possible short of causing injury to persons or severe damage to equipment.

#### 4. ELECTRIC POWER GENERATORS AND USERS

Yellow Alert - Electric power generating stations burning fossil fuels requested to reduce emissions in and into the affected area to the greatest extent practicable by adjusting operations system wide or by any other means approved by the Agency.

Public request to avoid unnecessary use of electricity.

Red Alert - Electric power generating stations burning fossil fuels required to take all Yellow Alert Actions and in addition discontinue power generation for economy sales and service to interruptable customers, and maximize purchase of available power.

Unnecessary use of electricity, such as for decorative or advertising purposes is prohibited.

Emergency - Electric power generating stations burning fossil fuel continue Yellow Alert and Red Alert actions and, in addition, effect the maximum feasible reduction of emissions by reducing voltage 2.5% system wide, purchase all available emergency power, and requesting large customers (500 kw) to reduce their electric demand or by any other means approved by the Agency.

#### 5. OFFICES, BUILDINGS, AND OTHER COMMERCIAL AND SERVICES OPERATIONS

Yellow Alert - Public requested to limit space heating to 65°F, air conditioning to 80°F.

Red Alert - Public, industrial and commercial space heating limited to 65°F, air conditioning to 80°F except for hospitals and for other buildings approved by the Agency.

Governmental agencies except those needed to administer essential programs close.

Schools close except elementary schools, which close at the end of the normal school day and do not reopen until the Alert is terminated.

The loading of more than 250 gallons of volatile organic material into any stationary tank, railroad tankcar, tank truck, or tank trailer is prohibited except where an integral part of an industrial operation allowed during Red Alert.

Emergency - All facilities or activities listed below immediately cease operations; mining and quarrying, contract construction work, wholesale trade establishments, retail trade stores except those dealing primarily in the sale of food or pharmaceuticals, real estate agencies, insurance offices and similar businesses, laundries, cleaners and dryers, beauty and barber shops and photographic studios. Amusement and recreational service establishments such as motion picture theaters, automobile repair and automobile service garages. Advertising offices, consumer credit reporting, adjustment and collection agencies, printing and duplicating services, rental agencies and commercial testing laboratories.

#### 6. REFUSE BURNERS

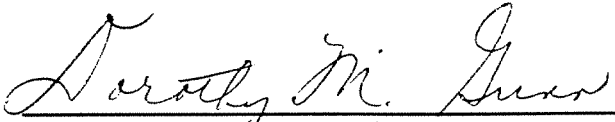
Yellow Alert - Governmental or commercial installations established primarily for the burning of refuse shall postpone delayable incinerations, all other incineration and all open burning prohibited.

Red Alert - All incineration prohibited.

(Source: Amended at 16 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 9<sup>th</sup> day of April, 1992 by a vote of 7-0.

  
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Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board