

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

- 1) Heading of the Part: Air Quality Standards
- 2) Code Citation: 35 Ill. Adm. Code 243
- 3)

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| <u>Section Numbers:</u> | <u>Proposed Action:</u> |
| 243.107 | Amend |
| 243.108 | Amend |
| 243.120 | Amend |
| 243.122 | Amend |
| 243.TABLE A | Amend |
- 4) Statutory Authority: 415 ILCS 5/7.2, 10, and 27

- 5) A Complete Description of the Subjects and Issues Involved: The following briefly describes the subjects and issues involved in this rulemaking. A comprehensive description is contained in the Board's opinion and order of September 5, 2013, proposing amendments in docket R14-6 for public comment, which opinion and order is available from the address below. As is explained in that opinion, the Board will receive public comment on the proposed amendments for 45 days from the date they appear in the Illinois Register before proceeding to adopt amendments based on this proposal.

The R14-6 proceeding relates to the Illinois ambient air quality requirements in 35 Ill. Adm. Code 243 of the Illinois air pollution control rules. These amendments would update the Illinois ambient air quality requirements to correspond with amendments to the federal National Ambient Air Quality Standards (NAAQSs) that the United States Environmental Protection Agency (USEPA) adopted during the period January 1, 2013 through June 30, 2013. The Federal NAAQS are codified at 40 C.F.R. 50. During this period, USEPA amended its NAAQSs as follows:

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| January 15, 2013 (78 Fed. Reg. 3086) | USEPA adopted new 2012 primary 24-hour and annual average NAAQS for PM _{2.5} . USEPA further revised the interpretation of the NAAQS for PM _{2.5} . |
| June 27, 2013 | USEPA updated the "List of Designated Reference and Equivalent Methods". |

The Board has further included amendments based on two USEPA actions that occurred after July 1, 2013. Those two federal actions are described as follows:

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| July 3, 2013 | USEPA amended appendix G to 40 C.F.R. 50 to establish a new federal reference method (FRM) for |
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| (78 Fed. Reg. 40000) August 5, 2013 | measuring lead in total suspended particulate matter for the purposes of the lead NAAQS. USEPA made area designations for the 2010 NAAQS for sulfur dioxide. |
| (78 Fed. Reg. 47191) | |

Tables appear in the Board's opinion and order of September 5, 2013 in docket R14-6 that list a limited number of deviations from the literal text of the federal amendments and corrections and amendments that are not directly based on current federal amendments. The tables contain deviations from the literal text of the federal amendments underlying these amendments, as well as corrections and clarifications that the Board made in the base text involved. Persons interested in the details of those corrections and amendments should refer to the September 5, 2013 opinion and order in docket R14-6.

Section 10(H) of the Environmental Protection Act [415 ILCS 5/10(H)] provides that Section 5-35 of the Administrative Procedure Act [5 ILCS 100/5-35] does not apply to this rulemaking. Because this rulemaking is not subject to Section 5-35 of the APA, it is not subject to First Notice or to Second Notice review by the Joint Committee on Administrative Rules.

- 6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: None
- 7) Will this proposed rulemaking replace any emergency rulemaking currently in effect?
No
- 8) Does this rulemaking contain an automatic repeal date? No
- 9) Does this proposed rulemaking contain incorporations by reference? Yes
- 10) Statement of Statewide Policy Objective: None
- 11) Are there any other rulemaking pending on this Part? No
- 12) Time, Place and Manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comment on this proposal for a period of 45 days after the date of this publication. Comments should reference docket R14-6 and be addressed to:

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John T. Therriault, Assistant Clerk
Illinois Pollution Control Board
State of Illinois Center, Suite 11-500
100 W. Randolph St.
Chicago, IL 60601

The Board will conduct one public hearing on the proposed amendments because they will ultimately result in submission to the United States Environmental Protection Agency of an amendment to the state implementation plan (SIP). Section 110(a)(2) of the Federal Clean Air Act (42 U.S.C. § 7410(a)(2) (2006)) requires reasonable notice and hearing before a state undertakes an amendment to the SIP. The public hearing will occur by videoconference at the following time and locations:

1:00 p.m., October 31, 2013

James R. Thompson Center
Illinois Pollution Control Board Hearing Room
100 West Randolph Street, Room 11-512
Chicago

and

Sangamo Building
Illinois Pollution Control Board Hearing Room
1021 North Grand Avenue
Springfield

Please direct inquiries to the following person and reference docket R14-6:

Michael J. McCambridge
Staff Attorney
Illinois Pollution Control Board
100 W. Randolph 11-500
Chicago, IL 60601

Phone: 312-814-6924
E-mail: mccambm@ipcb.state.il.us

Request copies of the Board's opinion and order at 312-814-3620, or download a copy from the Board's Website at <http://www.ipcb.state.il.us>.

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- 13) Initial regulatory flexibility analysis:
- A) Types of small businesses, small municipalities, and not-for-profit corporations affected: This rulemaking may affect those small businesses, small municipalities, and not-for-profit corporations that emit pollutants that could potentially affect ambient air quality in any area of Illinois. These proposed amendments do not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act. [30 ILCS 805/3(b) (2012)].
 - B) Reporting, bookkeeping or other procedures required for compliance: The existing rules and proposed amendments require extensive reporting, bookkeeping and other procedures, including emissions monitoring, annual reports, and maintenance of operating records. These proposed amendments do not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act. [30 ILCS 805/3(b) (2012)].
 - C) Types of professional skills necessary for compliance: Compliance with the existing rules and proposed amendments may require the services of an attorney, certified public accountant, chemist, and registered professional engineer. These proposed amendments do not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act. [30 ILCS 805/3(b) (2012)].
- 14) Regulatory Agenda on which this rulemaking was summarized: 37 Ill. Reg. 9060; June 28, 2013

The full text of the proposed rulemaking begins on the next page:

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

PART 243
AIR QUALITY STANDARDS

SUBPART A: GENERAL PROVISIONS

| | |
|---------|--|
| Section | |
| 243.101 | Definitions |
| 243.102 | Scope |
| 243.103 | Applicability |
| 243.104 | Nondegradation (Repealed) |
| 243.105 | Air Quality Monitoring Data Influenced by Exceptional Events |
| 243.106 | Monitoring (Repealed) |
| 243.107 | Reference Conditions |
| 243.108 | Incorporations by Reference |

SUBPART B: STANDARDS AND MEASUREMENT METHODS

| | |
|----------------|--|
| Section | |
| 243.120 | PM ₁₀ and PM _{2.5} |
| 243.121 | Particulates (Repealed) |
| 243.122 | Sulfur Oxides (Sulfur Dioxide) |
| 243.123 | Carbon Monoxide |
| 243.124 | Nitrogen Oxides (Nitrogen Dioxide as Indicator) |
| 243.125 | Ozone |
| 243.126 | Lead |
| 243.APPENDIX A | Rule into Section Table (Repealed) |
| 243.APPENDIX B | Section into Rule Table (Repealed) |
| 243.APPENDIX C | Past Compliance Dates (Repealed) |
| 243.TABLE A | Schedule of Exceptional Event Flagging and Documentation Submission for New or Revised NAAQS |

AUTHORITY: Implementing Sections 7.2 and 10 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, ~~10~~, 10 and 27].

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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. 8185, effective May 15, 1992; amended in R09-19 at 35 Ill. Reg. 18857, effective October 25, 2011; amended in R13-11 at 37 Ill. Reg. 12882, effective July 29, 2013; amended in R14-6 at 37 Ill. Reg. _____, effective _____.

SUBPART A: GENERAL PROVISIONS

Section 243.107 Reference Conditions

All measurements of air quality that are expressed as mass per unit volume (e.g., micrograms per cubic meter, other than for particulate matter (PM_{2.5}) standards contained in Section 243.120(b), and (c)₂ and (d) and lead standards contained in Section 243.126(b), are corrected to a reference temperature of 25^oC, and to a reference pressure of 760 millimeters of mercury (1013.2 millibars). Measurements of PM_{2.5}, for purposes of comparison to the standards contained in Section 243.120(b), and (c)₂ and (d), and lead, for purposes of comparison to the standards contained in Section 243.126(b), must be reported based upon the actual ambient air volume measured at the actual temperature and pressure at the monitoring site during the measurement period.

BOARD NOTE: Derived from 40 CFR 50.3 (~~2012~~)(~~2013~~)(2012).

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 243.108 Incorporations by Reference

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

Government Printing Office (GPO), 732 Capitol Street NW, Washington, DC 20401 (telephone: 202-512-1800 or 866-512-1800; website: www.gpo.gov). The following documents incorporated by reference are available from this source:

Appendix A-1 to 40 CFR 50 (~~2012~~)(~~2013~~)(2012) (Reference Measurement Principle and Calibration Procedure for the Measurement of Sulfur Dioxide in the Atmosphere (Ultraviolet Fluorescence Method)), referenced in Section 243.122.

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Appendix A-2 to 40 CFR 50 (~~2012~~)(2013)(2012) (Reference Method for the Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method)), referenced in Section 243.122.

Appendix B to 40 CFR 50 (~~2012~~)(2013)(2012) (Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High-Volume Method)), referenced in appendix G to 40 CFR 50 (see below).

Appendix C to 40 CFR 50 (~~2012~~)(2013)(2012) (Reference Measurement Principle and Calibration Procedure for the Measurement of Carbon Monoxide in the Atmosphere (Non-Dispersive Infrared Photometry)), referenced in Section 243.123.

Appendix D to 40 CFR 50 (~~2012~~)(2013)(2012) (Reference Measurement Principle and Calibration Procedure for the Measurement of Ozone in the Atmosphere), referenced in Section 243.125.

Appendix F to 40 CFR 50 (~~2012~~)(2013)(2012) (Reference Measurement Principle and Calibration Procedure for the Measurement of Nitrogen Dioxide in the Atmosphere (Gas Phase Chemiluminescence)), referenced in Section 243.124.

Appendix G to 40 CFR 50 (~~2012~~) (2013), as amended at 78 Fed. Reg. 40000 (July 3, 2013)(2012) (Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air), referenced in Section 243.126.

Appendix H to 40 CFR 50 (~~2012~~)(2013)(2012) (Interpretation of the 1-Hour Primary and Secondary National Ambient Air Quality Standards for Ozone), referenced in Section 243.125.

Appendix I to 40 CFR 50 (~~2012~~)(2013)(2012) (Interpretation of the 8-Hour Primary and Secondary National Ambient Air Quality Standards for Ozone), referenced in Section 243.125.

Appendix J to 40 CFR 50 (~~2012~~)(2013)(2012) (Reference Method for the Determination of Particulate Matter as PM₁₀ in the Atmosphere), referenced in Section 243.120.

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Appendix K to 40 CFR 50 ~~(2012)~~(2013)[\(2012\)](#) (Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Particulate Matter), referenced in Section 243.120.

Appendix L to 40 CFR 50 ~~(2012)~~(2013)[\(2012\)](#) (Reference Method for the Determination of Fine Particulate Matter as PM_{2.5} in the Atmosphere), referenced in Section 243.120.

Appendix N to 40 CFR 50 ~~(2012)~~ (2013), as amended at 78 Fed. Reg. 47191 (August 5, 2013)[\(2012\)](#) (Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Particulate Matter), referenced in Section 243.120.

Appendix O to 40 CFR 50 ~~(2012)~~(2013)[\(2012\)](#) (Reference Method for the Determination of Coarse Particulate Matter as PM_{10-2.5} in the Atmosphere), referenced in appendix Q to 40 CFR 50 and for use in federally required monitoring by the NCore system pursuant to 40 CFR 58.

Appendix P to 40 CFR 50 ~~(2012)~~(2013)[\(2012\)](#) (Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone), referenced in Section 243.125.

Appendix Q to 40 CFR 50 ~~(2012)~~(2013)[\(2012\)](#) (Reference Method for the Determination of Lead in Particulate Matter as PM₁₀ Collected from Ambient Air), referenced in appendix R to 40 CFR 50.

Appendix R to 40 CFR 50 ~~(2012)~~(2013)[\(2012\)](#) (Interpretation of the National Ambient Air Quality Standards for Lead), referenced in Section 243.126.

Appendix S to 40 CFR 50 ~~(2012)~~(2013)[\(2012\)](#) (Interpretation of the Primary National Ambient Air Quality Standards for Oxides of Nitrogen (Nitrogen Dioxide)), referenced in Section 243.124.

Appendix T to 40 CFR 50 ~~(2012)~~(2013)[\(2012\)](#) (Interpretation of the Primary National Ambient Air Quality Standards for Oxides of Sulfur (Sulfur Dioxide)), referenced in Section 243.122.

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Clean Air Act, 42 USC 7401 et seq. (2011) (for definitions of terms only), referenced in Section 243.102.

BOARD NOTE: Segments of the Code of Federal Regulations and the United States Code are available for free download as PDF documents from the GPO FDsys website: <http://www.gpo.gov/>.

USEPA, National Exposure Research Laboratory, Human Exposure & Atmospheric Sciences Division (MD-D205-03), Research Triangle Park, NC 27711. The following documents incorporated by reference are available from this source:

~~"List of Designated Reference and Equivalent Methods" (June 27, 2013)~~ (December 17, 2012) (~~June 27, 2013~~) (referred to as the ~~"List of Designated Methods"~~ and referenced in Sections 243.101, 243.120, 243.122, 243.123, 243.124, 243.125, and ~~243.126-243.126~~ This reference includes, as an FEM, the ~~no~~-former codified FRM that USEPA designated an FEM in the following ~~no~~ Federal Register ~~notices notice noticenotices~~ subsequent to ~~June 27, 2013~~ December 17, 2012 that updated List of Designated Methods. ~~June 27, 2013:~~

78 Fed. Reg. 40000 (July 3, 2013) (designating the former FRM in appendix G ~~to~~ of 40 CFR 50 as an FEM).

BOARD NOTE: ~~This document~~ The List of Designated ~~Methods~~ ~~Methods~~ ~~This document~~ is available for free download as a PDF document from the USEPA, Technology Transfer, Ambient Monitoring Technology Information Center website: [http://www.epa.gov/tta.html](http://www.epa.gov/tta/html).

(Source: Amended at 37 Ill. Reg. ———, effective ———)

SUBPART B: STANDARDS AND MEASUREMENT METHODS

Section 243.120 PM₁₀ and PM_{2.5}

- a) 1987 Primary and Secondary 24-Hour NAAQS for PM₁₀.
 - 1) The level of the 1987 primary and secondary 24-hour NAAQS for PM₁₀ is 150 µg/m³, 24-hour average concentration. The 1987 primary and secondary NAAQS for PM₁₀ is attained when the expected number of days

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per calendar year with a 24-hour average concentration above $150 \mu\text{g}/\text{m}^3$, as determined in accordance with appendix K to 40 CFR 50, incorporated by reference in Section 243.108, is equal to or less than one.

- 2) This subsection (a)(2) corresponds with 40 CFR 51.6(b), a provision marked "~~reserved~~" by USEPA. This statement maintains structural consistency with the corresponding federal regulation.
- 3) For the purpose of determining attainment of the 1987 primary and secondary 24-hour NAAQS for PM_{10} , particulate matter must be measured in the ambient air as PM_{10} by a method that fulfills either of the following requirements:
 - A) An FRM based on appendix J to 40 CFR 50, incorporated by reference in Section 243.108, and designated by USEPA and listed in List of Designated Methods, incorporated by reference in Section 243.108; or
 - B) An FEM designated by USEPA and listed in the List of Designated Methods, incorporated by reference in Section 243.108.

BOARD NOTE: This subsection (a) is derived from 40 CFR 50.6 (~~2012~~) (~~2013~~)(~~2012~~). USEPA adopted 1997 primary NAAQS for PM_{10} at 62 Fed. Reg. 38652 (July 18, 1997). As a result of a judicial vacatur, USEPA later removed the transitional provision relative to the 1987 NAAQS at 65 Fed. Reg. 80776 (Dec. 22, 2000) and the 1997 NAAQS at 69 Fed. Reg. 45595 (July 30, 2004). Thus, the 1987 primary and secondary NAAQS for PM_{10} are included in this subsection (a).

- b) 1997 Primary and Secondary Annual Average and 24-Hour NAAQS for $\text{PM}_{2.5}$.
 - 1) The 1997 primary and secondary annual average NAAQS for $\text{PM}_{2.5}$ is $15.0 \mu\text{g}/\text{m}^3$, annual arithmetic mean concentration, and the 1997 primary and secondary 24-hour NAAQS for $\text{PM}_{2.5}$ is $65 \mu\text{g}/\text{m}^3$, 24-hour average concentration, measured in the ambient air as $\text{PM}_{2.5}$ by a method that fulfills either of the following requirements:
 - A) An FRM based on appendix L of 40 CFR 50, incorporated by reference in Section 243.108, and designated by USEPA and listed in the List of Designated Methods, incorporated by reference in Section 243.108; or

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- B) An FEM designated by USEPA and listed in the List of Designated Methods, incorporated by reference in Section 243.108.
- 2) The 1997 primary and secondary annual average NAAQS for PM_{2.5} is met when the annual arithmetic mean concentration, as determined in accordance with appendix N of 40 CFR 50, incorporated by reference in Section 243.108, is less than or equal to 15.0 µg/m³.
- 3) The 1997 primary and secondary 24-hour NAAQS for PM_{2.5} is met when the 98th percentile 24-hour concentration, as determined in accordance with appendix N of 40 CFR 50, incorporated by reference in Section 243.108, is less than or equal to 65 µg/m³.

BOARD NOTE: This subsection (b) is derived from 40 CFR 50.7 ~~(2012)~~ ~~(2013)~~(2012). The 2006 primary and secondary annual average and 24-hour NAAQS for PM_{2.5} differs from the 1997 standards in that the 24-hour average concentration required by the 2006 standard is substantially lower (more stringent) than that for the 1997 standard. The Board has retained the 1997 standard in this subsection (b) because USEPA has retained the 1997 standard in 40 CFR 50.6.

- c) 2006 Primary and Secondary Annual Average and 24-Hour NAAQS for PM_{2.5}.
- 1) The 2006 primary and secondary annual average NAAQS for PM_{2.5} is 15.0 µg/m³, annual arithmetic mean concentration, and the 2006 primary and secondary 24-hour NAAQS for PM_{2.5} is 35 µg/m³, 24-hour average concentration, measured in the ambient air as PM_{2.5} by a method that fulfills either of the following requirements:
- A) An FRM based on appendix L of 40 CFR 50, incorporated by reference in Section 243.108, and designated by USEPA and listed in the List of Designated Methods, incorporated by reference in Section 243.108; or
- B) An FEM designated by USEPA and listed in the List of Designated Methods, incorporated by reference in Section 243.108.
- 2) The 2006 primary and secondary annual average NAAQS for PM_{2.5} is met when the annual arithmetic mean concentration, as determined in

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accordance with appendix N of 40 CFR 50, incorporated by reference in Section 243.108, is less than or equal to 15.0 $\mu\text{g}/\text{m}^3$.

- 3) The 2006 primary and secondary 24-hour NAAQS for $\text{PM}_{2.5}$ is met when the 98th percentile 24-hour concentration, as determined in accordance with appendix N of 40 CFR 50, incorporated by reference in Section 243.108, is less than or equal to 35 $\mu\text{g}/\text{m}^3$.

BOARD NOTE: This subsection (c) is derived from 40 CFR 50.13 ~~(2012)~~ (2013)(2012).

d) 2012 Primary Annual Average and 24-Hour NAAQS for $\text{PM}_{2.5}$

- 1) The 2012 primary annual average NAAQS for $\text{PM}_{2.5}$ is 12.0 $\mu\text{g}/\text{m}^3$ annual arithmetic mean concentration, and the 2012 primary 24-hour NAAQS for $\text{PM}_{2.5}$ is 35 $\mu\text{g}/\text{m}^3$ 24-hour average concentration, measured in the ambient air as $\text{PM}_{2.5}$ by a method that fulfills either of the following requirements:
 - A) An FRM based on appendix L of 40 CFR 50, incorporated by reference in Section 243.108, and designated by USEPA and listed in List of Designated Methods, incorporated by reference in Section 243.108; or
 - B) An FEM designated by USEPA and listed in List of Designated Methods, incorporated by reference in Section 243.108.
- 2) The 2012 primary annual NAAQS for $\text{PM}_{2.5}$ is met when the annual arithmetic mean concentration, as determined in accordance with appendix N of 40 CFR ~~50.50~~, incorporated by reference in Section 243.108, is less than or equal to 12.0 $\mu\text{g}/\text{m}^3$.
- 3) The 2012 primary 24-hour NAAQS for $\text{PM}_{2.5}$ is met when the 98th percentile 24-hour concentration, as determined in accordance with appendix N of 40 CFR 50, incorporated by reference in Section 243.108, is less than or equal to 35 $\mu\text{g}/\text{m}^3$.

BOARD NOTE: This subsection (d) is derived from 40 CFR 50.13 (2013).

(Source: Amended at 37 Ill. Reg. _____, effective _____)

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Section 243.122 Sulfur Oxides (Sulfur Dioxide)

- a) 1971 Primary Annual Average and 24-Hour NAAQS for Sulfur Oxides (as Sulfur Dioxide (SO₂)).
 - 1) The level of the 1971 primary annual average NAAQS for sulfur oxides is 0.030 ppm, not to be exceeded in a calendar year. The annual arithmetic mean must be rounded to three decimal places (fractional parts equal to or greater than 0.0005 ppm must be rounded up).
 - 2) The level of the 1971 primary 24-hour NAAQS for sulfur oxides is 0.14 ppm, not to be exceeded more than once per calendar year. The 24-hour averages must be determined from successive non-overlapping 24-hour blocks starting at midnight each calendar day and must be rounded to two decimal places (fractional parts equal to or greater than 0.005 ppm must be rounded up).
 - 3) Sulfur oxides must be measured in the ambient air as SO₂ by the FRM described in appendix A-2 to 40 CFR 50, incorporated by reference in Section 243.108, or by an FEM designated by USEPA and listed in the List of Designated Methods, incorporated by reference in Section 243.108.
 - 4) To demonstrate attainment, the annual arithmetic mean and the second-highest 24-hour averages must be based upon hourly data that are at least 75 percent complete in each calendar quarter. A 24-hour block average must be considered valid if at least 75 percent of the hourly averages for the 24-hour period are available. In the event that only 18-, 19-, 20-, 21-, 22-, or 23-hour averages are available, the 24-hour block average must be computed as the sum of the available hourly averages using the number of hours (i.e., 18, 19, etc.) as the divisor. If less than 18-hour averages are available, but the 24-hour average would exceed the level of the standard when zeros are substituted for the missing values, subject to the rounding rule of subsection (b) of this Section, this must be considered a valid 24-hour average. In this case, the 24-hour block average must be computed as the sum of the available hourly averages divided by 24.
 - 5) The 1971 primary annual average and 24-hour NAAQS for sulfur oxides set forth in this subsection (a) remains applicable to all areas notwithstanding the promulgation of the 2010 primary one-hour NAAQS

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for sulfur oxides in subsection (c) of this Section. The Board will delete the 1971 primary annual average and 24-hour NAAQS for sulfur oxides set forth in this subsection (a) after fulfillment of the conditions recited by USEPA in corresponding 40 CFR 50.4(e).

BOARD NOTE: Corresponding 40 CFR 50.4(e) recites that the 1971 primary NAAQS for sulfur oxides remains effective in two types of areas for which USEPA has not yet approved an implementation plan for attainment with the 2010 primary one-hour NAAQS for sulfur oxides. The first type of area is one that USEPA had designated as non-attainment for that standard as of the effective date of the 2010 primary one-hour NAAQS for the 1971 primary NAAQS for sulfur oxides as of the effective date of the 2010 NAAQS. That date was August 23, 2010. See 75 Fed. Reg. 35520 (June 22, 2010). As of that date, USEPA had not designated any area in Illinois as non-attainment. See 40 CFR 81.314 (2010). The Board is unaware of any USEPA SIP call for any area of Illinois relative to the 1971 primary NAAQS for sulfur oxides. As of December 31, 2012, USEPA had not yet designated the attainment status of two areas in Illinois for the 2010 primary one-hour NAAQS for sulfur oxides on August 5, 2013, effective October 4, 2013. See 40 CFR 81.314-(2012)-(2013), as amended at 78 Fed. Reg. 47191 (Aug. 5, 2013) (Lemont and Pekin areas). See 40 CFR 81.314 (2012). The 1971 primary annual average and 24-hour NAAQS for sulfur oxides will no longer apply to those two designated areas effective October 4, 2014; although the NAAQS will continue to apply to all other areas of Illinois after that date. The Agency recommended that USEPA designate limited areas of Illinois as non-attainment with the 2010 primary one-hour NAAQS. See letter of June 2, 2011 from Laurel Kroack, Chief, Bureau of Air, Agency, to Cheryl A. Newton, Director, Office of the Air and Radiation Division, USEPA

Region 5 (available at http://www.epa.gov/designations//_IL_rec_wtechanalysis.pdf). The 1971 primary annual average and 24-hour NAAQS for sulfur oxides will no longer apply to those two designated areas effective October 4, 2014; although the NAAQS will continue to apply to all other areas of Illinois after that date. When the conditions of this subsection (a)(5) have been fulfilled as to all areas of Illinois, or USEPA has removed 40 CFR 50.4, the Board will remove the standard of this subsection (a) as obsolete.

BOARD NOTE: This subsection (a) is derived from 40 CFR 50.4 (2012).

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- b) 1971 Secondary Three-Hour NAAQS for Sulfur Oxides (as SO₂).
- 1) The level of the 1971 secondary three-hour NAAQS for sulfur oxides is 0.5 ppm, not to be exceeded more than once per calendar year. The three-hour averages must be determined from successive non-overlapping three-hour blocks starting at midnight each calendar day and must be rounded to one decimal place (fractional parts equal to or greater than 0.05 ppm must be rounded up).
 - 2) Sulfur oxides must be measured in the ambient air as SO₂ by the FRM described in appendix A-2 to 40 CFR 50, incorporated by reference in Section 243.108, or by an FEM designated by USEPA and listed in List of Designated Methods, incorporated by reference in Section 243.108.
 - 3) To demonstrate attainment, the second-highest three-hour average must be based upon hourly data that are at least 75 percent complete in each calendar quarter. A three-hour block average must be considered valid only if all three hourly averages for the three-hour period are available. If only one or two hourly averages are available, but the three-hour average would exceed the level of the standard when zeros are substituted for the missing values, subject to the rounding rule of subsection (b)(1) of this Section, this must be considered a valid three-hour average. In all cases, the three-hour block average must be computed as the sum of the hourly averages divided by three.

BOARD NOTE: This subsection (b) is derived from 40 CFR 50.5 (2012).

- c) 2010 Primary One-Hour NAAQS for Sulfur Oxides (as SO₂).
- 1) The level of the 2010 primary one-hour NAAQS for sulfur oxides is 75 ppb, measured in the ambient air as SO₂.
 - 2) The 2010 one-hour primary NAAQS for sulfur oxides is met at an ambient air quality monitoring site when the three-year average of the annual (99th percentile) of the daily maximum one-hour average concentrations is less than or equal to 75 ppb, as determined in accordance with appendix T of 40 CFR 50, incorporated by reference in Section 243.108.
 - 3) The level of the 2010 one-hour primary NAAQS for sulfur oxides must be measured by an FRM based on appendix A-1 or A-2 of 40 CFR 50,

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incorporated by reference in Section 243.108, or by an FEM designated by USEPA and listed in List of Designated Methods, incorporated by reference in Section 243.108.

BOARD NOTE: This subsection (c) is derived from 40 CFR 50.17 (2012). The 1971 primary NAAQS for SO₂ remains in effect until the federal conditions of 40 CFR 50.4(e) have been fulfilled, as outlined in subsection (a)(5) of this Section and the appended Board note.

(Source: Amended at 37 Ill. Reg. ———, effective ———)

~~NOTICE OF PROPOSED AMENDMENTS~~**Section 243. TABLE A Schedule of Exceptional Event Flagging and Documentation Submission for New or Revised NAAQS**

| NAAQS (Level) Regulatory Citations | Air quality data collected for calendar year | Event flagging & initial description deadline | Detailed documentation submission deadline |
|---|--|--|--|
| 2006 24-hour PM _{2.5} (35 µg/m ³) Section 243.120(c)(1) 40 CFR 50.13(a) 71 Fed. Reg. 61144 (Oct. 17, 2006) | 2004–2006 | October 1, 2007 | April 15, 2008 |
| 2008 eight-hour ozone (0.075 ppm) Section 243.125(c)(1) 40 CFR 50.15(a) 73 Fed. Reg. 16436 (Mar. 27, 2008) | 2005–2007 2008 2009 | June 18, 2009 June 18, 2009 60 days after the end of the calendar quarter in which the event occurred or February 5, 2010, whichever date occurred first | June 18, 2009 June 18, 2009 60 days after the end of the calendar quarter in which the event occurred or February 5, 2010, whichever date occurred first |
| 2010 one-hour nitrogen oxides (as NO ₂) (100 ppb) Section 243.124(b) 40 CFR 50.11(b) 75 Fed. Reg. 6474 (Feb. 9, 2010) | 2008 2009 2010 | July 1, 2010 July 1, 2010 April 1, 2011 | January 22, 2011 January 22, 2011 July 1, 2010 |
| 2010 one-hour sulfur oxides (as SO ₂) (75 ppb) Section 243.122(c)(1) 40 CFR 17(a) 75 Fed. Reg. 35520 (June 22, 2010) | 2008 2009 2010 2011 | October 1, 2010 October 1, 2010 June 1, 2011 60 days after the end of the calendar quarter in which the event occurred or March 31, 2012, whichever date occurred first | June 1, 2011 June 1, 2011 June 1, 2011 60 days after the end of the calendar quarter in which the event occurred or March 31, 2012, whichever date occurred first |
| 2012 annual PM _{2.5} (12 µg/m ³) | 2010 and 2011 | July 1, 2013 July 1, 2013 | December 12, 2013 December 12, 2013 |

BOARD ICAR350243-1315314r01

NOTICE OF PROPOSED AMENDMENTS

| | | | |
|--|--------------|--------------|----------------|
| Section 243.120(d)(1) 40 CFR 50.18(a) 78 Fed. Reg. 3086 (Jan. 15, 2013) | 2012 2013 | July 1, 2014 | August 1, 2014 |
|--|--------------|--------------|----------------|

BOARD NOTE: Derived from table 1 to 40 CFR 50.14(c) (2012). USEPA noted that the information in this table of revised deadlines only applies to data that USEPA will use to establish the final initial area designations for new or revised NAAQS. USEPA stated that the general schedule in this table applies for all other purposes, most notably, for data that USEPA will use for redesignations to attainment. Corresponding table 1 to 40 CFR 50.14(c)(2) ~~cites the 2010 one-hour NAAQS for nitrogen oxides as "80-100 PPB, final level TBD" and the 2010 one-hour NAAQS for sulfur oxides as "80-100 PPB, final level TBD."~~ The adopted 2010 one-hour NAAQS for NO_x at 40 CFR 50.11(f) is 100 ppb and the adopted 2010 one-hour NAAQS for SO₂ is 75 ppb. The Board has used the actual NAAQS for these contaminants in this Table A. Further, corresponding table 1 to 40 CFR 50.14(c) includes endnotes "a" and "b" indicate whether dates for NO₂ and SO₂ are changed or unchanged, which the Board has omitted, since endnotes will serve no purpose in the Illinois regulations. includes a footnote "a," which includes a footnote "a" that indicates that the tabulated deadlines for event flagging and initial description for 2012 and 2013 data under the 2012 primary annual average NAAQS for PM_{2.5} are the same as those prescribed by 40 CFR 50.14 (corresponding with Section 243.105). The Board omitted those footnotes as unnecessary in the Illinois rules. Corresponding federal table 1 states that the 2012 primary annual average NAAQS for PM_{2.5} was "Promulgated December 14, 2012."2012". Although the Administrator of USEPA signed adopted rule on that date, publication did not occur until January 15, 2013. See 78 Fed. Reg. 3086, 3276 (Jan. 15, 2013). The Board has used the Federal Register citation and date cites the 2010 one-hour NAAQS for nitrogen oxides as "80-100 PPB, final level TBD" and the 2010 one-hour NAAQS for sulfur oxides as "80-100 PPB, final level TBD". The adopted 2010 one-hour NAAQS for NO_x at 40 CFR 50.11(f) is 100 ppb and the adopted 2010 one-hour NAAQS for SO₂ is 75 ppb. The Board has used the actual NAAQS for these contaminants in this Table A. Further, corresponding table 1 to 40 CFR 50.14(c) includes endnotes "a" and "b" indicate whether dates for NO₂ and SO₂ are changed or unchanged, which the Board has omitted, since endnotes will serve no purpose in the Illinois regulations.

(Source: Amended at 37 Ill. Reg. ———, effective ———)

Document comparison by Workshare Compare on Friday, September 13, 2013
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| Insertions | 57 |
| Deletions | 72 |
| Moved from | 7 |
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| Style change | 0 |
| Format changed | 0 |
| Total changes | 143 |

EXEMPT

JCAR350243-1315314r01

1 TITLE 35: ENVIRONMENTAL PROTECTION
2 SUBTITLE B: AIR POLLUTION
3 CHAPTER I: POLLUTION CONTROL BOARD
4 SUBCHAPTER I: AIR QUALITY STANDARDS AND EPISODES
5

6 PART 243
7 AIR QUALITY STANDARDS
8

9 SUBPART A: GENERAL PROVISIONS
10

| | | |
|----|---------|--|
| 11 | Section | |
| 12 | 243.101 | Definitions |
| 13 | 243.102 | Scope |
| 14 | 243.103 | Applicability |
| 15 | 243.104 | Nondegradation (Repealed) |
| 16 | 243.105 | Air Quality Monitoring Data Influenced by Exceptional Events |
| 17 | 243.106 | Monitoring (Repealed) |
| 18 | 243.107 | Reference Conditions |
| 19 | 243.108 | Incorporations by Reference |

20
21 SUBPART B: STANDARDS AND MEASUREMENT METHODS
22

| | | |
|----|----------------|--|
| 23 | Section | |
| 24 | 243.120 | PM ₁₀ and PM _{2.5} |
| 25 | 243.121 | Particulates (Repealed) |
| 26 | 243.122 | Sulfur Oxides (Sulfur Dioxide) |
| 27 | 243.123 | Carbon Monoxide |
| 28 | 243.124 | Nitrogen Oxides (Nitrogen Dioxide as Indicator) |
| 29 | 243.125 | Ozone |
| 30 | 243.126 | Lead |
| 31 | | |
| 32 | 243.APPENDIX A | Rule into Section Table (Repealed) |
| 33 | 243.APPENDIX B | Section into Rule Table (Repealed) |
| 34 | 243.APPENDIX C | Past Compliance Dates (Repealed) |
| 35 | 243.TABLE A | Schedule of Exceptional Event Flagging and Documentation Submission 36 for New or Revised NAAQS |

37
38 AUTHORITY: Implementing Sections 7.2 and 10 and authorized by Section 27 of the
39 Environmental Protection Act [415 ILCS 5/7.2, 10 and 27].
40

41 SOURCE: Adopted as Chapter 2: Air Pollution, Part III: Air Quality Standards, in R71-23, 4
42 PCB 191, filed and effective April 14, 1972; amended in R80-11, 46 PCB 125, at 6 Ill. Reg.
43 5804, effective April 22, 1982; amended in R82-12, at 7 Ill. Reg. 9906, effective August 18,

44 1983; codified at 7 Ill. Reg. 13630; amended in R91-35 at 16 Ill. Reg. 8185, effective May 15,
45 1992; amended in R09-19 at 35 Ill. Reg. 18857, effective October 25, 2011; amended in R13-11
46 at 37 Ill. Reg. 12882, effective July 29, 2013; amended in R14-6 at 37 Ill. Reg. _____, effective
47 _____.

48
49 **SUBPART A: GENERAL PROVISIONS**

50
51 **Section 243.107 Reference Conditions**

52
53 All measurements of air quality that are expressed as mass per unit volume (e.g., micrograms per
54 cubic meter, other than for particulate matter (PM_{2.5}) standards contained in Section 243.120(b),
55 ~~and (c) and (d)~~ and lead standards contained in Section 243.126(b), are corrected to a reference
56 temperature of 25° C, and to a reference pressure of 760 millimeters of mercury (1013.2
57 millibars). Measurements of PM_{2.5}, for purposes of comparison to the standards contained in
58 Section 243.120(b), ~~and (c) and (d)~~, and lead, for purposes of comparison to the standards
59 contained in Section 243.126(b), must be reported based upon the actual ambient air volume
60 measured at the actual temperature and pressure at the monitoring site during the measurement
61 period.

62
63 BOARD NOTE: Derived from 40 CFR 50.3 (2013)(2012).

64
65 (Source: Amended at 37 Ill. Reg. _____, effective _____)

66
67 **Section 243.108 Incorporations by Reference**

68
69 The following materials are incorporated by reference. These incorporations do not include any
70 later amendments or editions:

71
72 Government Printing Office (GPO), 732 Capitol Street NW, Washington DC
73 20401 (telephone: 202-512-1800 or 866-512-1800; website: www.gpo.gov).
74 The following documents incorporated by reference are available from this
75 source:

76
77 Appendix A-1 to 40 CFR 50 (2013)(2012) (Reference Measurement
78 Principle and Calibration Procedure for the Measurement of Sulfur
79 Dioxide in the Atmosphere (Ultraviolet Fluorescence Method)),
80 referenced in Section 243.122.

81
82 Appendix A-2 to 40 CFR 50 (2013)(2012) (Reference Method for the
83 Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline
84 Method)), referenced in Section 243.122.
85

86 Appendix B to 40 CFR 50 (2013)~~(2012)~~ (Reference Method for the
87 Determination of Suspended Particulate Matter in the Atmosphere (High-
88 Volume Method)), referenced in appendix G to 40 CFR 50 (see below).
89

90 Appendix C to 40 CFR 50 (2013)~~(2012)~~ (Reference Measurement
91 Principle and Calibration Procedure for the Measurement of Carbon
92 Monoxide in the Atmosphere (Non-Dispersive Infrared Photometry)),
93 referenced in Section 243.123.
94

95 Appendix D to 40 CFR 50 (2013)~~(2012)~~ (Reference Measurement
96 Principle and Calibration Procedure for the Measurement of Ozone in the
97 Atmosphere), referenced in Section 243.125.
98

99 Appendix F to 40 CFR 50 (2013)~~(2012)~~ (Reference Measurement
100 Principle and Calibration Procedure for the Measurement of Nitrogen
101 Dioxide in the Atmosphere (Gas Phase Chemiluminescence)), referenced
102 in Section 243.124.
103

104 Appendix G to 40 CFR 50 (2013), as amended at 78 Fed. Reg. 40000
105 (July 3, 2013)~~(2012)~~ (Reference Method for the Determination of Lead in
106 Suspended Particulate Matter Collected from Ambient Air), referenced in
107 Section 243.126.
108

109 Appendix H to 40 CFR 50 (2013)~~(2012)~~ (Interpretation of the 1-Hour
110 Primary and Secondary National Ambient Air Quality Standards for
111 Ozone), referenced in Section 243.125.
112

113 Appendix I to 40 CFR 50 (2013)~~(2012)~~ (Interpretation of the 8-Hour
114 Primary and Secondary National Ambient Air Quality Standards for
115 Ozone), referenced in Section 243.125.
116

117 Appendix J to 40 CFR 50 (2013)~~(2012)~~ (Reference Method for the
118 Determination of Particulate Matter as PM₁₀ in the Atmosphere),
119 referenced in Section 243.120.
120

121 Appendix K to 40 CFR 50 (2013)~~(2012)~~ (Interpretation of the Primary and
122 Secondary National Ambient Air Quality Standards for Particulate
123 Matter), referenced in Section 243.120.
124

125 Appendix L to 40 CFR 50 (2013)~~(2012)~~ (Reference Method for the
126 Determination of Fine Particulate Matter as PM_{2.5} in the Atmosphere),
127 referenced in Section 243.120.
128

129 Appendix N to 40 CFR 50 (2013), as amended at 78 Fed. Reg. 47191
130 (August 5, 2013)(2012) (Interpretation of the Primary and Secondary
131 National Ambient Air Quality Standards for Particulate Matter),
132 referenced in Section 243.120.
133

134 Appendix O to 40 CFR 50 (2013)(2012) (Reference Method for the
135 Determination of Coarse Particulate Matter as PM_{10-2.5} in the
136 Atmosphere), referenced in appendix Q to 40 CFR 50 and for use in
137 federally required monitoring by the NCore system pursuant to 40 CFR
138 58.
139

140 Appendix P to 40 CFR 50 (2013)(2012) (Interpretation of the Primary and
141 Secondary National Ambient Air Quality Standards for Ozone),
142 referenced in Section 243.125.
143

144 Appendix Q to 40 CFR 50 (2013)(2012) (Reference Method for the
145 Determination of Lead in Particulate Matter as PM₁₀ Collected from
146 Ambient Air), referenced in appendix R to 40 CFR 50.
147

148 Appendix R to 40 CFR 50 (2013)(2012) (Interpretation of the National
149 Ambient Air Quality Standards for Lead), referenced in Section 243.126.
150

151 Appendix S to 40 CFR 50 (2013)(2012) (Interpretation of the Primary
152 National Ambient Air Quality Standards for Oxides of Nitrogen (Nitrogen
153 Dioxide)), referenced in Section 243.124.
154

155 Appendix T to 40 CFR 50 (2013)(2012) (Interpretation of the Primary
156 National Ambient Air Quality Standards for Oxides of Sulfur (Sulfur
157 Dioxide)), referenced in Section 243.122.
158

159 Clean Air Act, 42 USC 7401 et seq. (2011) (for definitions of terms only),
160 referenced in Section 243.102.
161

162 BOARD NOTE: Segments of the Code of Federal Regulations and the United
163 States Code are available for free download as PDF documents from the GPO
164 FDsys website: <http://www.gpo.gov/fdsys/>.
165

166 USEPA, National Exposure Research Laboratory, Human Exposure &
167 Atmospheric Sciences Division (MD-D205-03), Research Triangle Park, NC
168 27711. The following documents incorporated by reference are available from
169 this source:
170

171 "List of Designated Reference and Equivalent Methods" (June 27,
172 2013)(December 17, 2012) (referred to as the "List of Designated
173 Methods" and referenced in Sections 243.101, 243.120, 243.122, 243.123,
174 243.124, 243.125, and 243.126 This reference includes, as an FEM, the
175 former codified FRM that USEPA designated an FEM in the following ~~no~~
176 Federal Register ~~notices~~ subsequent to June 27, 2013December 17,
177 2012 that updated List of Designated Methods.

178
179 78 Fed. Reg. 40000 (July 3, 2013) (designating the former FRM in
180 appendix G of 40 CFR 50 as an FEM).

181
182 BOARD NOTE: The List of Designated MethodsThis document is
183 available for free download as a PDF document from the USEPA,
184 Technology Transfer, Ambient Monitoring Technology Information
185 Center website: <http://www.epa.gov/ttn/amtic/criteria.html>.

186
187 (Source: Amended at 37 Ill. Reg. _____, effective _____)

188
189 SUBPART B: STANDARDS AND MEASUREMENT METHODS

190
191 **Section 243.120 PM₁₀ and PM_{2.5}**

- 192
193 a) 1987 Primary and Secondary 24-Hour NAAQS for PM₁₀.
- 194
195 1) The level of the 1987 primary and secondary 24-hour NAAQS for PM₁₀ is
196 150 µg/m³, 24-hour average concentration. The 1987 primary and
197 secondary NAAQS for PM₁₀ is attained when the expected number of
198 days per calendar year with a 24-hour average concentration above 150
199 µg/m³, as determined in accordance with appendix K to 40 CFR 50,
200 incorporated by reference in Section 243.108, is equal to or less than one.
- 201
202 2) This subsection (a)(2) corresponds with 40 CFR 51.6(b), a provision
203 marked "reserved" by USEPA. This statement maintains structural
204 consistency with the corresponding federal regulation.
- 205
206 3) For the purpose of determining attainment of the 1987 primary and
207 secondary 24-hour NAAQS for PM₁₀, particulate matter must be measured
208 in the ambient air as PM₁₀ by a method that fulfills either of the following
209 requirements:
- 210
211 A) An FRM based on appendix J to 40 CFR 50, incorporated
212 by reference in Section 243.108, and designated by USEPA

and listed in List of Designated Methods, incorporated by reference in Section 243.108; or

- B) An FEM designated by USEPA and listed in the List of Designated Methods, incorporated by reference in Section 243.108.

BOARD NOTE: This subsection (a) is derived from 40 CFR 50.6 (2013)(2012). USEPA adopted 1997 primary NAAQS for PM₁₀ at 62 Fed. Reg. 38652 (July 18, 1997). As a result of a judicial vacatur, USEPA later removed the transitional provision relative to the 1987 NAAQS at 65 Fed. Reg. 80776 (Dec. 22, 2000) and the 1997 NAAQS at 69 Fed. Reg. 45595 (July 30, 2004). Thus, the 1987 primary and secondary NAAQS for PM₁₀ are included in this subsection (a).

b) 1997 Primary and Secondary Annual Average and 24-Hour NAAQS for PM_{2.5}.

- 1) The 1997 primary and secondary annual average NAAQS for PM_{2.5} is 15.0 µg/m³, annual arithmetic mean concentration, and the 1997 primary and secondary 24-hour NAAQS for PM_{2.5} is 65 µg/m³, 24-hour average concentration, measured in the ambient air as PM_{2.5} by a method that fulfills either of the following requirements:

- A) An FRM based on appendix L of 40 CFR 50, incorporated by reference in Section 243.108, and designated by USEPA and listed in the List of Designated Methods, incorporated by reference in Section 243.108; or
- B) An FEM designated by USEPA and listed in the List of Designated Methods, incorporated by reference in Section 243.108.

- 2) The 1997 primary and secondary annual average NAAQS for PM_{2.5} is met when the annual arithmetic mean concentration, as determined in accordance with appendix N of 40 CFR 50, incorporated by reference in Section 243.108, is less than or equal to 15.0 µg/m³.

- 3) The 1997 primary and secondary 24-hour NAAQS for PM_{2.5} is met when the 98th percentile 24-hour concentration, as determined in accordance with appendix N of 40 CFR 50, incorporated by reference in Section 243.108, is less than or equal to 65 µg/m³.

BOARD NOTE: This subsection (b) is derived from 40 CFR 50.7 (2013)(2012). The 2006 primary and secondary annual average and 24-hour NAAQS for PM_{2.5} differs from the 1997 standards in that the 24-hour average concentration required by the 2006 standard is substantially lower (more

256 stringent) than that for the 1997 standard. The Board has retained the 1997
257 standard in this subsection (b) because USEPA has retained the 1997 standard in
258 40 CFR 50.6.

259
260 c) 2006 Primary and Secondary Annual Average and 24-Hour NAAQS for PM_{2.5}.

261
262 1) The 2006 primary and secondary annual average NAAQS for PM_{2.5} is
263 15.0 µg/m³, annual arithmetic mean concentration, and the 2006 primary
264 and secondary 24-hour NAAQS for PM_{2.5} is 35 µg/m³, 24-hour average
265 concentration, measured in the ambient air as PM_{2.5} by a method that
266 fulfills either of the following requirements:

267
268 A) An FRM based on appendix L of 40 CFR 50, incorporated by
269 reference in Section 243.108, and designated by USEPA and listed
270 in the List of Designated Methods, incorporated by reference in
271 Section 243.108; or

272
273 B) An FEM designated by USEPA and listed in the List of Designated
274 Methods, incorporated by reference in Section 243.108.

275
276 2) The 2006 primary and secondary annual average NAAQS for PM_{2.5} is met
277 when the annual arithmetic mean concentration, as determined in
278 accordance with appendix N of 40 CFR 50, incorporated by reference in
279 Section 243.108, is less than or equal to 15.0 µg/m³.

280
281 3) The 2006 primary and secondary 24-hour NAAQS for PM_{2.5} is met when
282 the 98th percentile 24-hour concentration, as determined in accordance
283 with appendix N of 40 CFR 50, incorporated by reference in Section
284 243.108, is less than or equal to 35 µg/m³.

285
286 BOARD NOTE: This subsection (c) is derived from 40 CFR 50.13 (2013)(2012).

287
288 d) 2012 Primary Annual Average and 24-Hour NAAQS for PM_{2.5}

289
290 1) The 2012 primary annual average NAAQS for PM_{2.5} is 12.0 µg/m³ annual
291 arithmetic mean concentration, and the 2012 primary 24-hour NAAQS for
292 PM_{2.5} is 35 µg/m³ 24-hour average concentration, measured in the ambient
293 air as PM_{2.5} by a method that fulfills either of the following requirements:

294
295 A) An FRM based on appendix L of 40 CFR 50, incorporated by
296 reference in Section 243.108, and designated by USEPA and listed
297 in List of Designated Methods, incorporated by reference in
298 Section 243.108; or

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- B) An FEM designated by USEPA and listed in List of Designated Methods, incorporated by reference in Section 243.108.
- 2) The 2012 primary annual NAAQS for PM_{2.5} is met when the annual arithmetic mean concentration, as determined in accordance with appendix N of 40 CFR 50, incorporated by reference in Section 243.108, is less than or equal to 12.0 µg/m³.
- 3) The 2012 primary 24-hour NAAQS for PM_{2.5} is met when the 98th percentile 24-hour concentration, as determined in accordance with appendix N of 40 CFR 50, incorporated by reference in Section 243.108, is less than or equal to 35 µg/m³.

BOARD NOTE: This subsection (d) is derived from 40 CFR 50.13 (2013).

(Source: Amended at 37 Ill. Reg. _____, effective _____)

Section 243.122 Sulfur Oxides (Sulfur Dioxide)

- a) 1971 Primary Annual Average and 24-Hour NAAQS for Sulfur Oxides (as Sulfur Dioxide (SO₂)).
 - 1) The level of the 1971 primary annual average NAAQS for sulfur oxides is 0.030 ppm, not to be exceeded in a calendar year. The annual arithmetic mean must be rounded to three decimal places (fractional parts equal to or greater than 0.0005 ppm must be rounded up).
 - 2) The level of the 1971 primary 24-hour NAAQS for sulfur oxides is 0.14 ppm, not to be exceeded more than once per calendar year. The 24-hour averages must be determined from successive non-overlapping 24-hour blocks starting at midnight each calendar day and must be rounded to two decimal places (fractional parts equal to or greater than 0.005 ppm must be rounded up).
 - 3) Sulfur oxides must be measured in the ambient air as SO₂ by the FRM described in appendix A-2 to 40 CFR 50, incorporated by reference in Section 243.108, or by an FEM designated by USEPA and listed in the List of Designated Methods, incorporated by reference in Section 243.108.
 - 4) To demonstrate attainment, the annual arithmetic mean and the second-highest 24-hour averages must be based upon hourly data that are at least 75 percent complete in each calendar quarter. A 24-hour block average

342 must be considered valid if at least 75 percent of the hourly averages for
 343 the 24-hour period are available. In the event that only 18-, 19-, 20-, 21-,
 344 22-, or 23-hour averages are available, the 24-hour block average must be
 345 computed as the sum of the available hourly averages using the number of
 346 hours (i.e., 18, 19, etc.) as the divisor. If less than 18-hour averages are
 347 available, but the 24-hour average would exceed the level of the standard
 348 when zeros are substituted for the missing values, subject to the rounding
 349 rule of subsection (b) of this Section, this must be considered a valid 24-
 350 hour average. In this case, the 24-hour block average must be computed
 351 as the sum of the available hourly averages divided by 24.
 352

- 353 5) The 1971 primary annual average and 24-hour NAAQS for sulfur oxides
 354 set forth in this subsection (a) remains applicable to all areas
 355 notwithstanding the promulgation of the 2010 primary one-hour NAAQS
 356 for sulfur oxides in subsection (c) of this Section. The Board will delete
 357 the 1971 primary annual average and 24-hour NAAQS for sulfur oxides
 358 set forth in this subsection (a) after fulfillment of the conditions recited by
 359 USEPA in corresponding 40 CFR 50.4(e).
 360

361 BOARD NOTE: Corresponding 40 CFR 50.4(e) recites that the 1971
 362 primary NAAQS for sulfur oxides remains effective in two types of areas
 363 for which USEPA has not yet approved an implementation plan for
 364 attainment with the 2010 primary one-hour NAAQS for sulfur oxides.
 365 The first type of area is one that USEPA had designated as non-attainment
 366 for that standard as of the effective date of the 2010 primary one-hour
 367 NAAQS for the 1971 primary NAAQS for sulfur oxides as of the effective
 368 date of the 2010 NAAQS. That date was August 23, 2010. See 75 Fed.
 369 Reg. 35520 (June 22, 2010). As of that date, USEPA had not designated
 370 any area in Illinois as non-attainment. See 40 CFR 81.314 (2010). The
 371 Board is unaware of any USEPA SIP call for any area of Illinois relative
 372 to the 1971 primary NAAQS for sulfur oxides. ~~As of December 31, 2012,~~
 373 ~~USEPA had not yet designated the attainment status of two areas in~~
 374 ~~Illinois for the 2010 primary one-hour NAAQS for sulfur oxides on~~
 375 ~~August 5, 2013, effective October 4, 2013. See 40 CFR 81.314 (2013), as~~
 376 ~~amended at 78 Fed. Reg. 47191 (Aug. 5, 2013) (Lemont and Pekin areas).~~
 377 ~~See 40 CFR 81.314 (2012). The 1971 primary annual average and 24-~~
 378 ~~hour NAAQS for sulfur oxides will no longer apply to those two~~
 379 ~~designated areas effective October 4, 2014; although the NAAQS will~~
 380 ~~continue to apply to all other areas of Illinois after that date. The Agency~~
 381 ~~recommended that USEPA designate limited areas of Illinois as non-~~
 382 ~~attainment with the 2010 primary one-hour NAAQS. See letter of June 2,~~
 383 ~~2011 from Laurel Kroack, Chief, Bureau of Air, Agency, to Cheryl A.~~
 384 ~~Newton, Director, Office of the Air and Radiation Division, USEPA~~

385 Region 5 (available at [http://www.epa.gov/so2designations/reeletters/](http://www.epa.gov/so2designations/reeletters/R5_IL_rec_wtechanalysis.pdf)
 386 R5_IL_rec_wtechanalysis.pdf). The 1971 primary annual average and 24-
 387 hour NAAQS for sulfur oxides will no longer apply to those two
 388 designated areas effective October 4, 2014; although the NAAQS will
 389 continue to apply to all other areas of Illinois after that date. When the
 390 conditions of this subsection (a)(5) have been fulfilled as to all areas of
 391 Illinois, or USEPA has removed 40 CFR 50.4, the Board will remove the
 392 standard of this subsection (a) as obsolete.

393
 394 BOARD NOTE: This subsection (a) is derived from 40 CFR 50.4-(2012).
 395

396 b) 1971 Secondary Three-Hour NAAQS for Sulfur Oxides (as SO₂).
 397

- 398 1) The level of the 1971 secondary three-hour NAAQS for sulfur oxides is
 399 0.5 ppm, not to be exceeded more than once per calendar year. The three-
 400 hour averages must be determined from successive non-overlapping three-
 401 hour blocks starting at midnight each calendar day and must be rounded to
 402 one decimal place (fractional parts equal to or greater than 0.05 ppm must
 403 be rounded up).
 404
 405 2) Sulfur oxides must be measured in the ambient air as SO₂ by the FRM
 406 described in appendix A-2 to 40 CFR 50, incorporated by reference in
 407 Section 243.108, or by an FEM designated by USEPA and listed in List of
 408 Designated Methods, incorporated by reference in Section 243.108.
 409
 410 3) To demonstrate attainment, the second-highest three-hour average must be
 411 based upon hourly data that are at least 75 percent complete in each
 412 calendar quarter. A three-hour block average must be considered valid
 413 only if all three hourly averages for the three-hour period are available. If
 414 only one or two hourly averages are available, but the three-hour average
 415 would exceed the level of the standard when zeros are substituted for the
 416 missing values, subject to the rounding rule of subsection (b)(1) of this
 417 Section, this must be considered a valid three-hour average. In all cases,
 418 the three-hour block average must be computed as the sum of the hourly
 419 averages divided by three.
 420

421 BOARD NOTE: This subsection (b) is derived from 40 CFR 50.5-(2012).
 422

423 c) 2010 Primary One-Hour NAAQS for Sulfur Oxides (as SO₂).
 424

- 425 1) The level of the 2010 primary one-hour NAAQS for sulfur oxides is 75
 426 ppb, measured in the ambient air as SO₂.
 427

- 428 2) The 2010 one-hour primary NAAQS for sulfur oxides is met at an ambient
429 air quality monitoring site when the three-year average of the annual (99th
430 percentile) of the daily maximum one-hour average concentrations is less
431 than or equal to 75 ppb, as determined in accordance with appendix T of
432 40 CFR 50, incorporated by reference in Section 243.108.
433
- 434 3) The level of the 2010 one-hour primary NAAQS for sulfur oxides must be
435 measured by an FRM based on appendix A-1 or A-2 of 40 CFR 50,
436 incorporated by reference in Section 243.108, or by an FEM designated by
437 USEPA and listed in List of Designated Methods, incorporated by
438 reference in Section 243.108.
439

440 BOARD NOTE: This subsection (c) is derived from 40 CFR 50.17-(2012). The
441 1971 primary NAAQS for SO₂ remains in effect until the federal conditions of 40
442 CFR 50.4(e) have been fulfilled, as outlined in subsection (a)(5) of this Section
443 and the appended Board note.
444

445 (Source: Amended at 37 Ill. Reg. _____, effective _____)
446

447 **Section 243.TABLE A Schedule of Exceptional Event Flagging and Documentation**
 448 **Submission for New or Revised NAAQS**
 449

| NAAQS (Level) Regulatory Citations | Air quality data collected for calendar year | Event flagging & initial description deadline | Detailed documentation submission deadline |
|--|--|--|--|
| 2006 24-hour PM _{2.5} (35 µg/m ³) Section 243.120(c)(1) 40 CFR 50.13(a) 71 Fed. Reg. 61144 (Oct. 17, 2006) | 2004-2006 | October 1, 2007 | April 15, 2008 |
| 2008 eight-hour ozone (0.075 ppm) Section 243.125(c)(1) 40 CFR 50.15(a) 73 Fed. Reg. 16436 (Mar. 27, 2008) | 2005-2007 2008 2009 | June 18, 2009 June 18, 2009 60 days after the end of the calendar quarter in which the event occurred or February 5, 2010, whichever date occurred first | June 18, 2009 June 18, 2009 60 days after the end of the calendar quarter in which the event occurred or February 5, 2010, whichever date occurred first |
| 2010 one-hour nitrogen oxides (as NO ₂) (100 ppb) Section 243.124(b) 40 CFR 50.11(b) 75 Fed. Reg. 6474 (Feb. 9, 2010) | 2008 2009 2010 | July 1, 2010 July 1, 2010 April 1, 2011 | January 22, 2011 January 22, 2011 July 1, 2010 |
| 2010 one-hour sulfur oxides (as SO ₂) (75 ppb) Section 243.122(c)(1) 40 CFR 17(a) 75 Fed. Reg. 35520 (June 22, 2010) | 2008 2009 2010 2011 | October 1, 2010 October 1, 2010 June 1, 2011 60 days after the end of the calendar quarter in which the event occurred or March 31, 2012, whichever date occurred first | June 1, 2011 June 1, 2011 June 1, 2011 60 days after the end of the calendar quarter in which the event occurred or March 31, 2012, whichever date occurred first |
| 2012 annual PM _{2.5} (12 µg/m ³) Section 243.120(d)(1) 40 CFR 50.18(a) 78 Fed. Reg. 3086 (Jan. 15, 2013) | 2010 and 2011 2012 2013 | July 1, 2013 July 1, 2013 July 1, 2014 | December 12, 2013 December 12, 2013 August 1, 2014 |

450
 451 BOARD NOTE: Derived from table 1 to 40 CFR 50.14(c) ~~(2012)~~. USEPA noted that the
 452 information in this table of revised deadlines only applies to data that USEPA will use to
 453 establish the final-initial area designations for new or revised NAAQS. USEPA stated that the
 454 general schedule in this table applies for all other purposes, most notably, for data that USEPA
 455 will use for redesignations to attainment. Corresponding table 1 to 40 CFR 50.14(c)(2) includes
 456 a footnote "a" that indicates that the tabulated deadlines for event flagging and initial description
 457 for 2012 and 2013 data under the 2012 primary annual average NAAQS for PM_{2.5} are the same
 458 as those prescribed by 40 CFR 50.14 (corresponding with Section 243.105). The Board omitted
 459 those footnotes as unnecessary in the Illinois rules. Corresponding federal table 1 states that the
 460 2012 primary annual average NAAQS for PM_{2.5} was "Promulgated December 14, 2012".
 461 Although the Administrator of USEPA signed adopted rule on that date, publication did not
 462 occur until January 15, 2013. See 78 Fed. Reg. 3086, 3276 (Jan. 15, 2013). The Board has used
 463 the Federal Register citation and date-cites the 2010 one-hour NAAQS for nitrogen oxides as
 464 "80-100 PPB, final level TBD" and the 2010 one-hour NAAQS for sulfur oxides as "80-100
 465 PPB, final level TBD". The adopted 2010 one-hour NAAQS for NO_x at 40 CFR 50.11(f) is 100
 466 ppb and the adopted 2010 one-hour NAAQS for SO₂ is 75 ppb. The Board has used the actual
 467 NAAQS for these contaminants in this Table A. Further, corresponding table 1 to 40 CFR
 468 50.14(e) includes endnotes "a" and "b" indicate whether dates for NO₂ and SO₂ are changed or
 469 unchanged, which the Board has omitted, since endnotes will serve no purpose in the Illinois
 470 regulations.

471
 472 (Source: Amended at 37 Ill. Reg. _____, effective _____)