

ILLINOIS POLLUTION CONTROL BOARD

May 21, 2020

IN THE MATTER OF:)
NATIONAL AMBIENT AIR QUALITY) R19-14
STANDARDS, USEPA AMENDMENTS) (Identical-in-Substance Rulemaking - Air)
(July 1, 2018 through December 31, 2018))
NATIONAL AMBIENT AIR QUALITY) R20-3
STANDARDS, USEPA AMENDMENTS) (Identical-in-Substance Rulemaking - Air)
(January 1, 2019 through June 30, 2019))
NATIONAL AMBIENT AIR QUALITY) R20-11
STANDARDS, USEPA AMENDMENTS) (Identical-in-Substance Rulemaking - Air)
(July 1, 2019 through December 31, 2019)) (Consolidated)

Proposed Rule. Proposal for Public Comment.

OPINION AND ORDER OF THE BOARD (by B.F. Currie):

Section 10(H) of the Illinois Environmental Protection Act (Act) (415 ILCS 5/10(H) (2018)) requires the Board to adopt ambient air quality standards that are identical in substance to the National Ambient Air Quality Standards (NAAQS) adopted by the United States Environmental Protection Agency (USEPA).

USEPA took two actions relating to NAAQS during the second half of 2018, the nominal timeframe of docket R19-14, that warrant Board attention. None prompt amendments in this rulemaking, but the Board notes them.

USEPA took four actions relating to NAAQS during the first half of 2019, the nominal timeframe of docket R20-3, that warrant Board attention. Two actions require Board action. Another prompts amendments in this rulemaking. The Board notes the fourth.

USEPA took three actions relating to NAAQS during the second half of 2019, the nominal timeframe of docket R20-11, that warrant Board attention. One action prompts amendments in this rulemaking. The Board notes the other.

USEPA updated the *List of Designated Reference and Equivalent Methods* at the end of 2019 to include all federal reference methods (FRMs) and federal equivalent methods (FEMs) designated to date. This updated version of the list includes all FRMs and FEMs designated through its December 15, 2019 publication date.

To maintain ambient air quality standards that are identical in substance to USEPA's NAAQS, this opinion and order does the following:

- It proposes amendments to Illinois regulations at 35 Ill. Adm. Code 243;
- It consolidates the amendments in dockets R19-14, R20-3, and R20-11;

- It states the Board’s finding that additional time is needed to complete amendments and extends the deadline for completion until September 30, 2020; and
- It proposes corrections and updates that the Board finds necessary.

The Board will cause the proposed amendments to be published in the *Illinois Register* and will receive public comments for at least 45 days after publication. The Board will also hold a public hearing on @@@. The Board expects to adopt final rules no later than September 30, 2020.

This opinion has six main segments. First, the Board identifies USEPA’s actions that resulted in this rulemaking. Second, the Board consolidates the amendments in three dockets to expedite Board action. Third, the Board finds that additional time is needed to complete the amendments, states the unavoidable reasons for delay, and provides its timetable for completing this rulemaking. Fourth, the Board summarizes the proposed corrections and updates that the Board finds necessary. Fifth, the Board invites public comment on the proposed amendments. Finally, the Board describes the scheduled public hearing and what will make up the contents of the rulemaking record.

The text of the Board’s proposed amendments is appended to the order following this opinion.

SUMMARY OF PROPOSED AMENDMENTS

Federal Regulations Implemented

During the three update periods included in this consolidated rulemaking, USEPA undertook nine actions regarding the NAAQS. The Board amends the Illinois ambient air quality standards in response to two of the actions in this consolidated docket.

The Board added an Identical-in-Substance Rulemaking Addendum (Proposed) (IIS-RA(P)) in the docket for this rulemaking. Table 1 lists the USEPA revisions not made. The list states the reason for each omission. Table 2 lists the changes the Board makes to the literal text of USEPA’s rules. Tables 3 and 4 relate to Board-initiated corrections and revisions discussed beginning on page 6 of this opinion.

October 16, 2018 (83 Fed. Reg. 52157)

USEPA corrected the November 16, 2017 and June 4, 2018 area designations for the 2015 NAAQS for ozone (O₃). USEPA omitted McHenry and Monroe Counties in Illinois on November 16, 2017 (82 Fed. Reg. 54232, 54243-45) and June 4, 2018 (83 Fed. Reg. 75776, 25801-04). USEPA corrected the omissions, designating both “attainment/unclassifiable.”

The Board notes this USEPA action. No Board action will be required based on USEPA’s correction. Neither the 2008 nor the 2015 NAAQS for O₃ has a revocation clause. *See* 40 C.F.R. §§ 50.15 and 50.19 (2019).

December 27, 2018 (83 Fed. Reg. 66631)

USEPA redesignated all areas in Illinois, formerly designated unclassifiable, as unclassifiable/attainment for the 2012 primary annual average NAAQS for fine particulate matter (PM_{2.5}).

The Board notes this USEPA action. No Board action will be required based on USEPA's correction. Neither the 1997 nor the 2006 NAAQS for PM_{2.5} has a revocation clause based on attainment of the 2012 NAAQS. *See* 40 C.F.R. §§ 50.7 and 50.13 (2019). See the discussion of USEPA's redesignating these areas as attainment for the 1997 NAAQS on May 28, 2019.

March 18, 2019 (84 Fed. Reg. 9866)

USEPA concluded after review to retain the existing 2010 primary NAAQS for sulfur dioxide (SO₂). No Board action will be required based on this USEPA action.

March 29, 2019 (84 Fed. Reg. 11973)

USEPA designated a new FEM for O₃ in ambient air. The Board must incorporate this method into the Illinois rules. USEPA's issuing an updated version of the *List of Designated Reference and Equivalent Methods* will allow the Board to incorporate that latest version by reference and obviate action on the March 29, 2019 designation individually.

May 28, 2019 (84 Fed. Reg. 24395)

USEPA redesignated the Metro East area¹ from "unclassifiable/attainment" to "attainment" for the 1997 primary and secondary NAAQS for PM_{2.5}. The effect is that the 1997 primary annual average NAAQS for PM_{2.5} no longer applies in any area in Illinois.

A USEPA revocation clause in the 2006 NAAQS for PM_{2.5} provides that the 1997 primary NAAQS for PM_{2.5} continued to apply in all areas until October 24, 2016,² After that date, the standard no longer applied to a specific area on the effective date of USEPA designating that area as attainment for the standard. 40 C.F.R. § 50.13(d) (2019). The effective date of the area redesignations was May 28, 2019.³ As of that date, the 1997 primary annual average NAAQS for PM_{2.5} no longer applies to any area in Illinois.

¹ Madison, Monroe, St. Clair Counties and the Baldwin Township portion of Randolph County

² The effective date of the implementation rule for the 2012 primary NAAQS for PM_{2.5} in subpart Z of 40 C.F.R. 51. 40 C.F.R. § 50.13(d) (2019); *see* 81 Fed. Reg. 58010 (Aug. 24, 2016) (adopting the implementation rule and stating the October 24, 2016 effective date).

³ 84 Fed. Reg. 24395 (May 28, 2019).

The Board must remove the 1997 primary annual average NAAQS for PM_{2.5} from the Illinois rules. The 1997 secondary annual average and primary and secondary 24-hour NAAQS for PM_{2.5} remain in effect.⁴

Effecting USEPA's intent is not straightforward. There is ambiguity in the federal rules. The revocation clause is appended to the 2006 NAAQS for PM_{2.5} in 40 C.F.R. § 50.13, not the 1997 NAAQS for PM_{2.5} in 40 C.F.R. § 50.7.

When incorporating the revocation clause into the Illinois rules, the Board observed this.⁵ The Board proposed adding the revocation clause to the provision for the 1997 standard. Prompted by Agency comments, the Board incorporated the clause into both the 1997 and 2006 standards. The Agency convinced the Board that the 2006 primary annual average NAAQS for PM_{2.5} is the 1997 primary annual average NAAQS for PM_{2.5}.

The Board believes that removing the 1997 primary annual average NAAQS for PM_{2.5} requires also removing 1997 primary annual NAAQS from the 2006 NAAQS for .PM_{2.5}. Doing so requires amendments in both 35 Ill. Adm. Code 243.120(b) and (c).⁶

May 28, 2019 (84 Fed. Reg. 24508)

USEPA designated a new FRM for monitoring carbon monoxide in ambient air. The Board must incorporate this method into the Illinois rules. USEPA's issuing an updated version of the *List of Designated Reference and Equivalent Methods* will allow the Board to incorporate that latest version by reference and obviate action on the May 28, 2019 designation individually.

August 23, 2019 (84 Fed. Reg. 44238)

USEPA reclassified the Chicago-Naperville area from moderate to serious nonattainment for the 2008 primary and secondary NAAQS for O₃. This action changes the state implementation plan (SIP) requirements and attainment deadline for this area, but it does not affect the NAAQS standards that apply and how they apply.⁷ No Board action will be required based on this USEPA action.

⁴ 40 C.F.R. § 50.13(d) (2019).

⁵ NAAQS Update, USEPA Amendments (July 1, 2016 through December 31, 2016, March 20, 2017, May 11, 2017, and June 16, 2017), R17-10 (Oct. 2017), slip. op. at 4-8.

⁶ Removing the elements corrects the error in the Board note to 35 Ill. Adm. Code 243.120(c) stating, "primary and secondary annual average NAAQS for PM_{2.5} in this subsection (c) is the 1997 primary annual average NAAQS for PM_{2.5}." The words "and secondary" were included in error.

⁷ See subpart X of 40 C.F.R. 51 (2019).

September 13, 2019 (84 Fed. Reg. 48286)

USEPA reconsidered its 2016 designation of Williamson County as nonattainment for the 2010 NAAQS for SO₂.⁸ The effective date of the reconsideration is October 15, 2019.⁹ USEPA's reconsideration of the Williamson County area designation does not directly require Board action, but it does prompt Board action. The Board limits applicability of the 2010 NAAQS for SO₂ to Macon County.

The revocation clause for the 1971 primary annual average and 24-hour NAAQS for SO₂ provides that the 1971 NAAQS apply to an area until one year after the effective date of a USEPA area designation for the 2010 primary NAAQS for SO₂. One year after those area designation dates for areas in Illinois varies from October 4, 2014 through April 9, 2019. The effective date of the recent reconsideration for Williamson County does not change the effective date of the earlier, operative, area designation as nonattainment; the revocation clause does not rely on designation as attainment for the 2010 standard.

The revocation clause further provides that the 1971 NAAQS for SO₂ will continue to apply after the date based on effective date of the area designation in any area that was designated nonattainment for the 1971 NAAQS on the August 22, 2010 effective date of the 2010 NAAQS.¹⁰ There were no such nonattainment areas in Illinois on August 22, 2010.¹¹

USEPA's reconsideration of the Williamson County area designation prompts the Board to further limit applicability of the 1971 primary annual average and one-hour NAAQS for SO₂ in Illinois. Since the Board last limited applicability of the 1971 NAAQS,¹² USEPA made additional area designations for the 2012 NAAQS for areas in Illinois.¹³ It now appears that the only area that USEPA has not designated is Macon County. USEPA intends to make that area designation by the end of this year.¹⁴

The Board revises 35 Ill. Adm. Code 243.122(a) to limit applicability to Macon County. The Board note now explains that the Board will remove the 1971 NAAQS after 40 C.F.R.

⁸ 81 Fed. Reg. 45039, 45047 (July 12, 2016).

⁹ 84 Fed. Reg. at 48286.

¹⁰ 40 C.F.R. § 50.4(e) (2019); *see* 75 Fed. Reg. 35520 (June 22, 2010).

¹¹ *See* 40 C.F.R. § 81.314 (2010) (table for Illinois SO₂); *List of CFR Sections Affected*, August 2010 (no entry for 40 C.F.R. § 81.314).

¹² In NAAQS Update, USEPA Amendments (January 1, 2018 through June 30, 2018), R19-6 (Feb. 14, 2019), slip op. at 4-5.

¹³ 83 Fed. Reg. 1098, 1119-21 (Jan. 9, 2018).

¹⁴ *See* 40 C.F.R. § 81.314 (2019) (table for Illinois—2010 SO₂, note 3).

§ 50.4 no longer applies in Macon County (one year after an area designation for Macon County under the 2010 NAAQS).

September 26, 2019 (84 Fed. Reg. 50833)

USEPA designated a new FRM for monitoring nitrogen dioxide in ambient air. The Board must incorporate this method into the Illinois rules. USEPA's issuing an updated version of the *List of Designated Reference and Equivalent Methods* will allow the Board to incorporate that latest version by reference and obviate action on the September 26, 2019 designation individually.

December 15, 2019

USEPA released an updated version of the *List of Designated Reference and Equivalent Methods*. This update version adds the FRMs and FEM that USEPA designated on March 29, 2019; May 28, 2019; and September 26, 2019. Updating the incorporation by reference in 35 Ill. Adm. Code 243.108 to this version of the *List* will incorporate those FRMs and FEM.

Board-Initiated Corrections and Revisions

The Board includes limited Board-initiated corrections and revisions with the USEPA amendments. JCAR suggested two of these corrections and revisions.¹⁵ The rest originate from Board review of the text of the rules.

The Board finds that all of the Board-initiated corrections and revisions are needed.

Table 3 in the IIS-RA(P) lists these Board-initiated corrections and revisions. Table 4 lists corrections requested by JCAR that the Board declines to make. Each entry in Table 4 states reasons for not making the correction.

Requests for Comments

The Board requests that interested persons review this opinion and order and submit comments on the proposed amendments. In addition to this general request for comments, the Board submits the following specific requests for comments:

1. Do USEPA area designations relating to O₃ NAAQS have any impact on the effect of any of the O₃ NAAQS?
2. Do USEPA's area designations for the 2012 NAAQS for PM_{2.5} have any effect on the 1987 or 1997 NAAQS?

¹⁵ In an October 3, 2013 letter that the Board received May 17, 2019 and added to the record in SDWA Update, USEPA Amendments (January 1, 2016 through June 30, 2016), R19-6 (Feb. 14, 2019) after conclusion of that rulemaking.

3. Does the Board appropriately remove the 1997 and 2006 primary annual average NAAQS for PM_{2.5} from the Illinois rules?
4. Does the Board appropriately limit applicability of the 1971 primary annual average and 24-hour NAAQS for SO₂ from the Illinois rules?
5. Did the Board appropriately add the new FRMs and FEM into the Illinois rules?
6. Did the Board appropriately effect the JCAR-requested corrections and revisions?

CONSOLIDATING DOCKETS

Board consideration of USEPA actions from three update periods is required. The quickest and most efficient way to complete all amendments is through a single rulemaking. Separate consideration of the three dockets involved would require more time and increased commitment of Board resources. For this reason, the Board consolidates dockets R19-14, R20-3, and R20-11.

REASONS FOR UNAVOIDABLE DELAY, EXTENDED DUE DATE, AND TIMETABLE TO COMPLETE RULEMAKING

The statutory due date for this proceeding was March 29, 2020 (one year after the USEPA action requiring Board action in this docket). To complete this proceeding by that date, the Board would have needed to adopt this proposal for public comment by December 19, 2019.

The Board finds that more time is needed to complete rulemaking on the present amendments. The Board encountered several factors that contributed to unavoidable delay in preparing this proposal for public comment. The time needed to complete the amendments in SDWA Update, USEPA Amendments (July 1, 2018 through December 31, 2018), R19-16 (Apr. 16, 2020) and prepare a proposal in RCRA Subtitle C Update, USEPA Amendments (January 1, 2019 through June 30, 2019), R20-8, RCRA Subtitle C Update, USEPA Amendments (July 1, 2019 through December 31, 2019), R20-16 (May 21, 2020) exceeded that normally expected. Significant absences due to illnesses and injuries of the Board staff member assigned to work on this proposal and the current state of emergency due to the COVID-19 crisis further significantly contributed to the delay.

The Board observes that adopting this proposal for public comment today will enable the Board, assuming no further delay occurs, to follow the schedule below:

Board order proposing amendments:	May 21, 2020
Submission for <i>Illinois Register</i> publication:	June 1, 2020
Estimated <i>Illinois Register</i> publication date:	June 12, 2020
Public Hearing on Amendments	July 16, 2020
Estimated end of 45-day public comment period:	July 27, 2020
Board order adopting amendments:	August 6, 2020
Estimated filing and effective date:	August 17, 2020
Estimated <i>Illinois Register</i> publication date:	August 28, 2020

The Board believes it necessary to add one month to this projected schedule to accommodate minimal further delay. For these reasons, the Board extends the deadline for final Board action until September 30, 2020.

PUBLIC HEARING & RULEMAKING RECORD

The Board expects that the Illinois Environmental Protection Agency (Illinois EPA) will submit these amendments to USEPA to be included in the Illinois state implementation plan (SIP) under section 110 of the federal Clean Air Act (42 U.S.C. § 7410(a) (2016)) and the implementing USEPA regulations. *See* 40 C.F.R. § 51.102 and appendix V (2017).

As USEPA will require the State to have conducted a hearing on the amendments to the Illinois NAAQS rules involved in this proceeding pursuant to 42 U.S.C. § 4210(a) and 40 C.F.R. § 51.102

The Board scheduled a public hearing to allow the public to comment on the proposed amendments and the anticipated SIP revision. The Board will conduct that hearing by videoconference between the Board's offices in Chicago and Springfield, as follows:

11:50 a.m., Thursday, July 16, 2020

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

and

Illinois Environmental Protection Agency Building
Illinois Pollution Control Board Hearing Room, Room 1244N, First Floor
1021 North Grand Avenue East
Springfield

Due to the Coronavirus pandemic and Executive Orders in effect at the time of this opinion and order, the Board is providing remote access through Webex as an additional platform for public participation.

Use the following for remote access via Webex:

Meeting number (access code): 288 342 643

Meeting password: 3NwnDH6pJm3

Remote Access by Webex with Video:

Hyperlink: <https://illinois.webex.com/illinois/j.php?MTID=m3da6af1115c11cbd59249d98ff67ad17>

Once on the Webex page, click “Join Now”, then enter the Meeting number and Password information:

Remote Access by Webex by Telephone without Video:

Phone: 312-535-8110, or 415-655-0002

Only persons physically present at either of the two hearing locations given above and those remotely participating by video will be allowed to give testimony on the record. Testimony will not be allowed by those participating by telephone. This does not limit the right of any person to submit public comments on the proposed amendments.

The Board invites public comment on the proposed amendments. The Board will receive public comments until at least 45 days after a notice of these proposed amendments appears in the *Illinois Register*. Anyone may file a public comment with the Board addressed as follows:

Office of the Clerk
Pollution Control Board
James R. Thompson Center
100 W. Randolph Street, Suite 11-500
Chicago, Illinois 60601

All comments relating to this rulemaking should clearly refer to consolidated docket R19-14/R20-3/R20-11.

The record in this docket will include all documents pertaining to this proceeding. All documents in the record are publicly available online at the Board’s website, the right as provided in 2 Ill. Adm. Code 211.2175.

The record will not include a copy of the following documents, which are publicly available from other sources:

- *Federal Register* notices;
- Federal statutes and regulations; and
- Illinois statutes and regulations.

Together with the Notice of Proposed Amendment, the Board will submit a Notice of Public Information on Proposed Rules for concurrent publication in the *Illinois Register*. In that Notice, the Board provides the hearing date and information on how to obtain documents and participate in this proceeding. Please direct any questions to:

Michael McCambridge, Staff Attorney
Pollution Control Board
100 West Randolph Street, Room 11-500
Chicago, Illinois 60601
312-814-6924
michael.mccambridge@illinois.gov

Interested persons may request documents from or file documents with:

Don A. Brown, Clerk of the Board
Pollution Control Board
100 West Randolph Street, Room 11-500
Chicago, Illinois 60601
312-814-3629
don.brown@illinois.gov

After the hearing and public comment period, the Board will promptly issue an order adopting final rule amendments. The Board will then file the amendments with the Office of the Secretary of State, and a Notice of Adopted Amendments will appear in the *Illinois Register*. Any Illinois EPA submission of the associated SIP revision to USEPA would follow that Notice.


The Board finds that these measures will satisfy the federal requirements for SIP revision, in 33 U.S.C. § 7410(a) (2016) and 40 C.F.R. § 51.102, as to subjects included in this proceeding.

ORDER

The Board directs the Clerk to provide notice in the *Illinois Register* of the appended proposed amendments to the Illinois ambient air quality regulations at 35 Ill. Adm. Code 243.

IT IS SO ORDERED.

I, Don A. Brown, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on May 21, 2020, by a vote of 4-0.



Don A. Brown, Clerk
Illinois Pollution Control Board

TEXT OF PROPOSED AMENDMENTS

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 for Flagging and Documentation Submission for Data Influenced by Exceptional Events for Use in Initial Area Designations (Repealed)

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

SOURCE: Adopted as Chapter 2: Air Pollution, Part III: Air Quality Standards, in R71-23, filed and effective April 14, 1972; amended in R80-11, 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. 19848, effective November 27, 2013; amended in R14-16 at 38 Ill. Reg. 12900, effective June 9, 2014; amended in R15-4 at 39 Ill. Reg. 5434, effective March 24, 2015; amended in R16-2 at 40 Ill. Reg. 4906, effective March 3, 2016;

amended in R17-1 at 41 Ill. Reg. 1121, effective January 23, 2017; amended in R17-10 at 41 Ill. Reg. 13413, effective October 23, 2017; amended in R18-15 at 42 Ill. Reg. 9308, effective May 29, 2018; amended in R19-6 at 43 Ill. Reg. 3034, effective February 19, 2019; amended in R19-14/R20-3/R20-11 at 44 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:

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 ~~(2019)~~-(2018) (Reference Measurement Principle and Calibration Procedure for the Measurement of Sulfur Dioxide in the Atmosphere (Ultraviolet Fluorescence Method)), referenced in Section 243.122.

Appendix A-2 to 40 CFR 50 ~~(2019)~~-(2018) (Reference Method for the Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method)), referenced in Section 243.122.

Appendix B to 40 CFR 50 ~~(2019)~~-(2018) (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 ~~(2019)~~-(2018) (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 ~~(2019)~~-(2018) (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 ~~(2019)~~-(2018) (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 ~~(2019)~~-(2018) (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 ~~(2019)~~~~(2018)~~ (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 ~~(2019)~~~~(2018)~~ (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 ~~(2019)~~~~(2018)~~ (Reference Method for the Determination of Particulate Matter as PM₁₀ in the Atmosphere), referenced in Section 243.120.

Appendix K to 40 CFR 50 ~~(2019)~~~~(2018)~~ (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 ~~(2019)~~~~(2018)~~ (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 ~~(2019)~~~~(2018)~~ (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 ~~(2019)~~~~(2018)~~ (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 ~~(2019)~~~~(2018)~~ (Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone), referenced in Section 243.125.

Appendix Q to 40 CFR 50 ~~(2019)~~~~(2018)~~ (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 ~~(2019)~~~~(2018)~~ (Interpretation of the National Ambient Air Quality Standards for Lead), referenced in Section 243.126.

Appendix S to 40 CFR 50 ~~(2019)~~~~(2018)~~ (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 ~~(2019)-(2018)~~ (Interpretation of the Primary National Ambient Air Quality Standards for Oxides of Sulfur (Sulfur Dioxide)), referenced in Section 243.122.

Appendix U to 40 CFR 50 ~~(2019)-(2018)~~ (Interpretation of the Primary National Ambient Air Quality Standards for Ozone), referenced in Section 243.125.

Clean Air Act, 42 USC 7401 et seq. ~~(2019)-(2016)~~ (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/fdsys/>.

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” ~~(December 15, 2019) (June 15, 2018)~~ (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.

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

(Source: Amended at 44 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 per calendar year with a 24-hour average concentration above 150 µg/m³, 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 50.6(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 PM₁₀, particulate matter must be measured in the ambient air as PM₁₀ 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 List of Designated Methods, incorporated by reference in Section 243.108.

BOARD NOTE: This subsection (a) is derived from 40 CFR 50.6. ~~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 Primary and Secondary 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.
- 4) ~~The 1997 primary annual PM_{2.5} NAAQS in this subsection (b) does not apply in any area of Illinois except Madison, Monroe, and St. Clair Counties and the Baldwin Village area of Randolph County. The primary NAAQS for PM_{2.5} in this subsection (b) will no longer apply in any area of Illinois after USEPA has redesignated that area as attainment for that standard. The 1997 secondary annual NAAQS for PM_{2.5} and the 1997 24-hour PM_{2.5} NAAQS in this subsection (b) remain applicable.~~

~~BOARD NOTE: USEPA has codified the area designations for Illinois in 40 CFR 81.314. All areas of Illinois were designated attainment or unclassifiable/attainment except Madison, Monroe, and St. Clair Counties and the Baldwin Village area of Randolph County.~~

~~BOARD NOTE: This subsection (b) is derived from 40 CFR 50.7, and 50.13(d). The Board added the revocation clause of 40 CFR 50.13(d) as both this subsections (b)(4) and (c)(4), even though USEPA did not add the text to corresponding 40 CFR 50.7.~~

- c) ~~2006 Primary and Secondary Annual Average and Primary and Secondary 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 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 2006 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 $35 \mu\text{g}/\text{m}^3$.

- ~~4) The primary annual $\text{PM}_{2.5}$ NAAQS in this subsection (c) does not apply in any area of Illinois except Madison, Monroe, and St. Clair Counties and the Baldwin Village area of Randolph County. The primary annual $\text{PM}_{2.5}$ NAAQS in this subsection (c) will no longer apply in any area of Illinois after USEPA has redesignated that area as attainment for that standard. The secondary annual $\text{PM}_{2.5}$ NAAQS in this subsection (c) remains applicable.~~

~~BOARD NOTE: USEPA has codified the area designations for Illinois in 40 CFR 81.314. All areas of Illinois were designated attainment or unclassifiable/attainment except Madison, Monroe, and St. Clair Counties and the Baldwin Village area of Randolph County.~~

~~BOARD NOTE: The primary and secondary annual average NAAQS for $\text{PM}_{2.5}$ in this subsection (c) is the 1997 primary annual average NAAQS for $\text{PM}_{2.5}$. USEPA retained the standard and included it with the 2006 standard in corresponding 40 CFR 50.13. See 71 Fed. Reg. 61144, 61176 (Oct. 17, 2006). This subsection (c) is derived from 40 CFR 50.13.~~

- 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, 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 50.18.

(Source: Amended at 44 Ill. Reg. _____, effective _____)

Section 243.122 Sulfur Oxides (Sulfur Dioxide)

- a) This 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) apply only in Macon County. ~~remains applicable to all areas notwithstanding the promulgation of the 2010 primary one-hour NAAQS for sulfur oxides in subsection (e) 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) fulfillment of the conditions recited by USEPA in corresponding 40 CFR 50.4(e).~~

BOARD NOTE: ~~Derived This subsection (a) is derived from 40 CFR 50.4. This subsection (a) no longer applies in the following areas in Illinois. The Board will delete the 1971 primary annual average and 24-hour NAAQS for sulfur oxides set forth in this subsection (a) after 40 CFR 50.4 no longer applies: one year the effective date of a USEPA area designation for Macon County, Cook County (Lemont Township only), Peoria County (Hollis Township only), Tazewell County (Cincinnati and Pekin Townships only), Will County (DuPage and Lockport Townships only), Bureau County, Jasper County, Madison County (Wood River Township, an area of southeastern Alton Township, and an area of northern Chouteau Township only), Massac County, Putnam County, and Williamson County.~~

- 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), 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.

- 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, 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. 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) and the appended Board note.

(Source: Amended at 44 Ill. Reg. _____, effective _____)

Section 243.123 Carbon Monoxide

- a) The 1971 eight-hour and one-hour primary NAAQS for carbon monoxide are as follows:
 - 1) An eight-hour average concentration of 9 ppm (10 mg/m³), not to be exceeded more than once per year; and
 - 2) A one-hour average concentration of 35 ppm (40 mg/m³), not to be exceeded more than once per year.
- b) The levels of carbon monoxide in the ambient air must be measured by a method that fulfills either of the following requirements:
 - 1) An FRM based on appendix C 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
 - 2) An FEM designated by USEPA and listed in the List of Designated Methods, incorporated by reference in Section 243.108.
- c) An eight-hour average concentration must be considered valid if at least 75 percent of the hourly average for the eight-hour period is available. In the event that only six-hour (or seven-hour) averages are available, the eight-hour average must be computed on the basis of the hours available using six (or seven) as the divisor.
- d) When summarizing data for comparison with the standards, averages must be stated to one decimal place. Comparison of the data with the levels of the standards in ppm must be made in terms of integers with fractional parts of 0.5 or greater rounded up.

BOARD NOTE: ~~Derived This Section is derived~~ from 40 CFR 50.8-(2012).

(Source: Amended at 44 Ill. Reg. _____, effective _____)

Section 243.124 Nitrogen Oxides (Nitrogen Dioxide as Indicator)

- a) The level of the 1971 primary annual average NAAQS for nitrogen oxides is 53 ppb, annual average concentration, measured in the ambient air as nitrogen dioxide (NO₂).
- b) The level of the 2010 primary one-hour NAAQS for nitrogen oxides is 100 ppb, one-hour average concentration, measured in the ambient air as NO₂.
- c) The level of the 1971 secondary annual average NAAQS for nitrogen oxides is 0.053 ppm (100 µg/m³), annual arithmetic mean concentration, measured in the ambient air as NO₂.
- d) The levels of the standards in subsections (a) through (c) of this Section must be measured by:
 - 1) An FRM based on appendix F to 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
 - 2) By an FEM designated by USEPA and listed in the List of Designated Methods, incorporated by reference in Section 243.108.
- e) The 1971 primary annual average NAAQS for nitrogen oxides in subsection (a) of this Section is met when the annual average concentration in a calendar year is less than or equal to 53 ppb, as determined in accordance with appendix S of 40 CFR 50, incorporated by reference in Section 243.108, for the annual standard.
- f) The 2010 one-hour primary NAAQS for nitrogen oxides in subsection (b) of this Section is met when the three-year average of the annual 98th percentile of the daily maximum one-hour average concentration is less than or equal to 100 ppb, as determined in accordance with appendix S of 40 CFR 50, incorporated by reference in Section 243.108, for the 1-hour standard.
- g) The 1971 secondary annual average NAAQS for nitrogen oxides in subsection (c) of this Section is attained when the annual arithmetic mean concentration in a calendar year is less than or equal to 0.053 ppm, rounded to three decimal places (fractional parts equal to or greater than 0.0005 ppm must be rounded up). To demonstrate attainment, an annual mean must be based upon hourly data that are at least 75 percent complete or upon data derived from manual methods that are at least 75 percent complete for the scheduled sampling days in each calendar quarter.

BOARD NOTE: ~~Derived This Section is derived~~ from 40 CFR 50.11-(2012).

(Source: Amended at 44 Ill. Reg. _____, effective _____)

Section 243.126 Lead

- a) 1978 Primary and Secondary Quarterly Average NAAQS for Lead

BOARD NOTE: ~~Derived This subsection (a) is derived~~ from 40 CFR 50.12. USEPA designated Granite City as nonattainment with the 2008 primary and secondary three-month average NAAQS for lead effective December 31, ~~2010~~ 2011 and an area of Chicago effective December 31, ~~2011-2012~~. See 76 Fed. Reg. 72097, 79108 (Nov. 22, 2011); ~~75 Fed. Reg. Fed Reg.~~ 71033, 71042 (Nov. 22, 2010). Thus, this subsection (a) was obsolete on December 31, 2012, and the Board removed it.

- b) 2008 Primary and Secondary Three-Month Average NAAQS for Lead

- 1) The 2008 primary and secondary three-month average NAAQS for lead and its compounds is $0.15 \mu\text{g}/\text{m}^3$, arithmetic mean concentration over a three-month period, measured in the ambient air as lead by either of the following:

- A) An FRM based on appendix G 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 2008 primary and secondary three-month average NAAQS for lead are met when the maximum arithmetic three-month mean concentration for a three-year period, as determined in accordance with appendix R of 40 CFR 50, incorporated by reference in Section 243.108, is less than or equal to $0.15 \mu\text{g}/\text{m}^3$.

BOARD NOTE: ~~Derived This Section is derived~~ from 40 CFR 50.16.

(Source: Amended at 44 Ill. Reg. _____, effective _____)