

ILLINOIS POLLUTION CONTROL BOARD
May 12, 2022

IN THE MATTER OF:)
NATIONAL AMBIENT AIR QUALITY) R22-8
STANDARDS, USEPA AMENDMENTS) (Identical-in-Substance Rulemaking - Air)
(January 1, 2021 through June 30, 2021))

Adopted Rule. Final Order.

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

The Board today adopts amendments to the Illinois ambient air quality standards, responding to United States Environmental Protection Agency (USEPA) actions during the first half of 2021.

This is an identical-in-substance (IIS) rulemaking under Sections 7.2 and 10(H) of the Illinois Environmental Protection Act (Act) (415 ILCS 5/7.2 and 10(H) (2020)). Section 10(H) requires the Board to adopt standards that are identical in substance to the National Ambient Air Quality Standards (NAAQS) adopted by USEPA under section 109 of the Clean Air Act (CAA) (42 U.S.C. § 7409 (2019)).

Section 10(H) of the Act and Section 1-5(c)(1) of the Administrative Procedure Act (APA) (5 ILCS 100/5-1-5(c)(1) (2020)) further provide that Title VII of the Act (415 ILCS 5/Tit. VII (2020)) and Section 5-35 of the APA (5 ILCS 100/5-35 (2020)) do not apply to IIS rulemaking. Accordingly, the Board needs not adopt a “First Notice” proposal and a “Second Notice” proposal for review by JCAR. However, Section 7.2 of the Act requires the Board to consider comments from USEPA, the Illinois Environmental Protection Agency (Agency), the Attorney General, and the public before adopting IIS rules.

The Board today revises the Illinois ambient air quality standards based on three USEPA actions during the first half of 2021. The Board updates one incorporation by reference. The Board incorporates one new federal reference method (FRM) and one new federal equivalent method (FEM) into the Illinois rules. The Board removes a NAAQS from the Illinois rules that is not revoked as to all areas in the State. The Board takes note of a fourth USEPA action that does not prompt Board action.

Included are limited non-substantive corrections and revisions that the Board finds are needed. These are limited to updating incorporations by reference.

The Board adopted a proposal for public comment on February 17, 2022. A Notice of Proposed Amendments appeared in the *Illinois Register* on March 4, 2022, at 46 Ill. Reg. 3485. The 45-day public comment period ended April 18, 2022. The February 17, 2022 opinion and order found that the Board needed additional time to complete action on the proposed amendments and extended the due date until June 1, 2022.

A Notice of Public Information also appeared in the *Illinois Register* on March 4, 2022, at 46 Fed. Reg. 3612. That notice gave notice of public hearing on the proposal.

The Board held a public hearing on the proposed amendments on April 21, 2022. The Illinois Environmental Protection Agency (Agency) was represented at the hearing. The Agency suggested corrections to the February 17, 2022 opinion and order but no changes to the proposed amendments.

During the public comment period, the Board received a document from the Joint Committee on Administrative Rules (JCAR) showing the text of the proposed amendments as prepared for publication in the *Illinois Register*. JCAR suggested no revisions to the text of the amendments.

SUMMARY OF ADOPTED AMENDMENTS

Federal Actions Implemented

USEPA designated new methods for demonstrating compliance with the NAAQS. USEPA also redesignated the ambient air quality attainment status of two areas in Illinois.

March 4, 2021 (86 Fed. Reg. 12682)

USEPA designated a new FRM for sulfur dioxide (SO₂) and a new FEM for coarse particulate matter (PM₁₀) in ambient air. The Board must incorporate this FRM into the Illinois rules.

March 26, 2021 (86 Fed. Reg. 16055)

USEPA issued the Round 4 area designations for the primary 2010 one-hour NAAQS for SO₂. See 40 C.F.R. § 50.17 (2021). This action redesignated the Macon County area from nonattainment to attainment/unclassifiable, effective April 30, 2021. This action designates the last area in Illinois under the 2010 NAAQS.

USEPA's approval means that the 1971 primary 24-hour and annual average NAAQS for sulfur dioxide no longer applies in Illinois on April 30, 2022. 40 C.F.R. § 50.4(e) (2021). After that date, the Board can remove 35 Ill. Adm. Code 243.122(a) (corresponding with 40 C.F.R. § 50.4) from the Illinois rules.

June 14, 2021 (86 Fed. Reg. 31439)

USEPA revised the ambient air quality designations for 13 counties in six nonattainment areas in four states, including Illinois, under the 2015 primary and secondary NAAQS for ozone. USEPA reconsidered its June 8, 2018 (83 Fed. Reg. 257776) area designations. This was in response to the remand in *Clean Wisconsin v. EPA*, 964 F.3d 1145 (D.C. Cir. 2020). The result of the redesignations is that USEPA redesignated McHenry and Monroe Counties in Illinois from full county attainment to full county nonattainment, effective July 14, 2021.

Neither of the 2008 or 2015 NAAQS for ozone includes a revocation clause. 40 C.F.R. §§ 50.15 and 50.19 (2021). USEPA's reconsideration of its area designations does not affect applicability of either ozone NAAQS in any area of Illinois. The Board simply notes USEPA's action.

June 15, 2021

USEPA released an updated version of the *List of Designated Reference and Equivalent Methods*. The update incorporates the new FRM and FEM designated on March 4, 2021.

December 15, 2021

USEPA released an updated version of the *List of Designated Reference and Equivalent Methods*. The update supersedes the June 15, 2021 version and includes the March 4, 2021 FRM and FEM. Updating the incorporation by reference for the *List* to this latest version incorporates that FRM and FEM into the Illinois rules.

Although the December 15, 2021 update would ordinarily fall within the docket R22-16 update for the second half of 2021, including it here allowed dismissal of reserved docket R22-16 today. The December 15, 2021 version of the *List of Designated Reference and Equivalent Methods* adds nothing to the June 15, 2021 version, but the Board prefers incorporating the later version by reference in this rulemaking.

Board Responses to USEPA's Actions

The Board adds USEPA's FRM and FEM designations by updating the incorporation by reference to the latest version of the *List of Designated Reference and Equivalent Methods*.

The Board removes the now-revoked 1971 primary 24-hour and annual average NAAQS for sulfur dioxide from the Illinois rules.

The Board added an Identical-in-Substance Rulemaking Addendum (Final) (IIS-RA(F)) in the docket for this rulemaking. Table 1 lists the changes the Board makes to the literal text of USEPA's rules. Table 2 lists Board-initiated corrections and revisions, which are discussed immediately below.

Board-Initiated Corrections and Revisions

The Board includes limited Board-initiated corrections and revisions with the USEPA amendments. These are limited to updating *Code of Federal Regulations* and *United States Code* citations to the latest version available in incorporations by reference.

The Board finds that these corrections and revisions are needed.

Table 2 in the IIS-RA(P) lists these Board-initiated corrections and revisions. Each entry states reasons for the correction or revision.

Requests for Comments

The Board requested 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 specifically requested comments on the following:

1. Did the Board appropriately add the new FRM into the Illinois rules?
2. Is there any way that USEPA's 1971 primary 24-hour and annual average NAAQS for sulfur dioxide has continuing affect anywhere in Illinois that would justify retaining it?
3. Are any of the Board-initiated corrections and revisions problematic?

The Board received no comments in response.

ORDER

The Board directs the Clerk to file the adopted amendments with the Office of the Secretary of State and provide notice in the *Illinois Register* of the appended adopted 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 12, 2022, by a vote of 5-0.



Don A. Brown, Clerk
Illinois Pollution Control Board

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. 14223, effective August 18, 2020; amended in R21-1 at 45 Ill. Reg. 337, effective December 17, 2020; amended in R22-8 at 46 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), Washington, DC 20401, 202-783-3238, www.govinfo.gov/. The following documents incorporated by reference are available from this source:

Appendix A-1 to 40 CFR 50 ~~(2019)~~ (2021) (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)~~ (2021) (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)~~ (2021) (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)~~ (2021) (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)~~ (2021) (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)~~ (2021) (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 (2021) ~~(2019)~~-(Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air), referenced in Section 243.126.

Appendix J to 40 CFR 50 (2021) ~~(2019)~~-(Reference Method for the Determination of Particulate Matter as PM₁₀ in the Atmosphere), referenced in Section 243.120.

Appendix K to 40 CFR 50 (2021) ~~(2019)~~-(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 (2021) ~~(2019)~~-(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 (2021) ~~(2019)~~-(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 (2021) ~~(2019)~~-(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 (2021) ~~(2019)~~-(Interpretation of the Primary and Secondary National Ambient Air Quality Standards for Ozone), referenced in Section 243.125.

Appendix Q to 40 CFR 50 (2021) ~~(2019)~~-(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 (2021) ~~(2019)~~-(Interpretation of the National Ambient Air Quality Standards for Lead), referenced in Section 243.126.

Appendix S to 40 CFR 50 (2021) ~~(2019)~~-(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 (2021) ~~(2019)~~-(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 (2021)(2019)-(Interpretation of the Primary National Ambient Air Quality Standards for Ozone), referenced in Section 243.125.

Clean Air Act, 42 USC 7401 et seq. (2020)(2018)-(for definitions of terms only), referenced in Section 243.101.

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: www.govinfo.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” (December 15, 2021) (June 15, 2020)-(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 46 Ill. Reg. _____, effective _____)

SUBPART B: STANDARDS AND MEASUREMENT METHODS

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) apply only in Macon County.~~

~~BOARD NOTE: Derived from 40 CFR 50.4. This subsection (a) no longer applies in any area of Illinois outside Macon County. 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 after the effective date of a USEPA area designation for Macon County.~~

ab) 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 (~~a~~b) is derived from 40 CFR 50.5.

be) 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 (b~~e~~) 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 46 Ill. Reg. _____, effective _____)