## ILLINOIS POLLUTION CONTROL BOARD November 4, 2010

IN THE MATTER OF:	)	
	)	
AIR QUALITY STANDARDS CLEAN-UP:	)	R09-19
AMENDMENTS TO 35 ILL. ADM. CODE	)	(Rulemaking - Air)
PARTS 217, 223, AND 243	)	_

Proposed Rule. First Notice.

OPINION AND ORDER OF THE BOARD (by A.S. Moore)

For first-notice publication in the *Illinois Register*, the Board today proposes amendments to its air pollution regulations. *See* 35 Ill. Adm. Code 217, 223, 243. The Illinois Environmental Protection Agency (Agency or Illinois EPA) initiated this proceeding by filing a rulemaking proposal on December 1, 2008. After conducting two public hearings in this matter and considering the entire record, the Board proposes for first notice the amendments to its air quality standards described below in this opinion.

The proposed amendments are intended to update Part 243 of the Board's regulations to reflect federal air quality standards and to make technical corrections to Sections 217.388 and 223.205. *See* 35 III. Adm. Code 217.388 (nitrogen oxides control and maintenance requirements), 223.205 (volatile organic material emissions standard and limits for consumer and commercial products), 243 (Air Quality Standards). Publication of these proposed amendments in the *Illinois Register* will begin a 45-day public comment period. *See* 5 ILCS 100/5-40(b) (2006) (Illinois Administrative Procedure Act).

In the opinion below, the Board first provides the procedural history of this rulemaking and then addresses preliminary issues. The Board then provides background on federal air quality standards before summarizing the Agency's original proposal, its January 20, 2009 motion to amend the proposal, its testimony, and its *errata* sheet filed on April 14, 2009. The Board next summarizes testimony offered by the Illinois Environmental Regulatory Group (IERG) before addressing the post-hearing comments. After discussing the issues raised, the Board reaches its conclusion. The order following this opinion then sets forth the proposed amendments for first-notice publication in the *Illinois Register*.

## **PROCEDURAL HISTORY**

On December 1, 2008, the Agency filed a proposal to amend the air quality standards at Part 243 of the Board's regulations (Prop.). *See* 35 Ill. Adm. Code 243. A Statement of

<sup>&</sup>lt;sup>1</sup> Although the Agency's original proposal included only amendments to Part 243, the Board concludes below that the record also supports limited amendment of Parts 217 and 223. Accordingly, the Board amends the caption to reflect that its first-notice proposal includes these two additional Parts.

Reasons (SR) and a Technical Support Document accompanied the proposal. In an order dated December 18, 2008, the Board accepted the proposal for hearing.

In an order dated December 23, 2008, the hearing officer scheduled two hearings: the first on February 3, 2009, in Edwardsville, and the second on March 10, 2009, in Chicago. The same hearing officer order set a deadline of January 20, 2009, to pre-file testimony for the first hearing. On January 20, 2009, the Agency filed a motion to reschedule the first hearing and to set a new deadline to prefile testimony for it. Also on January 20, 2009, the Agency filed a motion to amend its rulemaking proposal (Mot. Amend).

In an order dated January 30, 2009, the hearing officer granted the Agency's motion to reschedule the first hearing, rescheduled it on March 10, 2009, in Chicago, and set a deadline of February 24, 2009, to pre-file testimony for it.

In an order dated February 19, 2009, the Board granted the Agency's motion to amend its proposal.

On March 3, 2009, the Agency filed a motion to file *instanter* the testimony of Mr. Robert Kaleel. Mr. Kaleel's testimony (Kaleel Test.) and a revised Technical Support Document (TSD) accompanied the motion.

The first hearing took place on March 10, 2009, and the Board received the transcript on March 20, 2009 (Tr.1). During the first hearing, the hearing officer admitted one exhibit into the record of this proceeding: 40 C.F.R 50.2 – 50.15 (Exh. 1). *See* Tr.1 at 15. Also during the first hearing, the hearing officer granted the Agency's motion to file *instanter* the testimony of Mr. Kaleel. Tr.1 at 4-5.

In an order dated March 10, 2009, the hearing officer scheduled the second hearing on April 28, 2009, in Springfield and set April 14, 2009, as the deadline to pre-file testimony for it.

On April 14, 2009, the Agency filed an *errata* sheet to its proposal (*Errata*). On the same date, IERG pre-filed the testimony of Mr. David L. Kolaz (Kolaz Test.) for the second hearing.

The second hearing took place on April 28, 2009, and the Board received the transcript (Tr.2) on May 7, 2009. During the second hearing, the hearing office admitted three exhibits into the record: the cover page, page six, and pages 62-66 of the Agency's 2007 Illinois Annual Air Quality Report (Exh. 2); a "Summary of Pekin Sulfur Dioxide Data from USEPA's [United States Environmental Protections Agency's] Airdata System" (Exh. 3); and a document entitled "Example Standard Language for Sulfur Oxides, Carbon Monoxide and Nitrogen Dioxide" (Exh. 4).

As required by Section 27(b) of the Act (415 ILCS 5/27(b) (2008)) the Board requested in a letter dated December 19, 2008, that the Department of Commerce and Economic Opportunity (DCEO) determine whether it would conduct an economic impact study of the Agency's rulemaking proposal. DCEO did not respond to the Board's request. At the second hearing, the hearing officer noted the Board's request to DCEO and the absence of a response to

it. Tr.2 at 37. Although the hearing officer afforded those present an opportunity to testify regarding the request, no participant offered testimony regarding that issue. *See id.* at 37-38.

In an order dated May 8, 2009, the hearing officer set June 8, 2009, as the deadline to file post-hearing comments.

On June 8, 2009, both the Agency (PC 1), and IERG (PC 2) filed post-hearing comments. On June 9, 2009, the Agency filed corrected post-hearing comments (PC 3) accompanied by a motion for leave to file *instanter* (Mot. Leave).

On July 28, 2009, the Agency filed a "Motion to File *Instanter* a Request to Add an Amendment to Part 223 to the Current Rulemaking" (Mot. Add).

On October 2, 2009, the Board docketed as a public comment an e-mail to the hearing officer from the Agency (PC 4).

#### **Filing Public Comments**

First-notice publication of these proposed amendments in the *Illinois Register* will start a period of at least 45 days during which any person may file a public comment with the Board, regardless of whether the person has already filed a public comment. *See* 5 ILCS 100/5-40(b) (2008) (Illinois Administrative Procedure Act). The Board encourages comments on these proposed amendments. The docket number for this rulemaking, R09-19, should be indicated on the public comment.

Public comments must be filed with the Clerk of the Board at the following address:

Pollution Control Board John T. Therriault, Assistant Clerk James R. Thompson Center 100 W. Randolph Street, Suite 11-500 Chicago, IL 60601

Public comments may be filed electronically through the Board's Clerk's Office On-Line, or COOL, at <a href="www.ipcb.state.il.us">www.ipcb.state.il.us</a>. Any questions about electronic filing through COOL should be directed to the Clerk's Office at (312) 814-3629.

Please note that all filings with the Clerk of the Board must be served on the hearing officer and on those persons on the Service List for this rulemaking. Before filing any document with the Clerk, please check with the hearing officer or the Clerk's Office to verify the most recent version of the Service List.

#### PRELIMINARY ISSUES

#### Motion for Leave to File Corrected Post-Hearing Comments Instanter

After it filed post-hearing comments on June 8, 2009, the Agency on June 9, 2009, filed corrected post-hearing comments accompanied by a motion for leave to file *instanter*. The Agency states that, because of a miscommunication, the comments it originally filed were "not the finished product." Mot. Leave at 1. Characterizing that original filing as an accident, the Agency seeks leave to file its corrected post-hearing comments *instanter*. *Id*.

Section 101.500(d) of the Board's procedural rules provides in pertinent part that, "[w]ithin 14 days after service of a motion, a party may file a response to the motion. If no response is filed, the party will be deemed to have waived objection to the granting of the motion, but the waiver of objection does not bind the Board or the hearing officer in its disposition of the motion." 35 Ill. Adm. Code 101.500(d). The Board has received no response to the Agency's motion for leave to file *instanter*. Based on its review of the Agency's motion, and in the absence of any response, the Board grants the motion for leave and accepts the Agency's corrected post-hearing comments, which are summarized below. *See infra at* 13-15.

#### Motion to File Instanter a Request to Add an Amendment to Part 223

On July 28, 2009, the Agency filed a "Motion to File *Instanter* a Request to Add an Amendment to Part 223 to the Current Rulemaking." The Agency states that, on January 2, 2008, it filed a proposal to add a new Part 223 addressing organic material emission for area sources. Mot. Add at 1; *see* 35 Ill. Adm. Code 223; <u>Standards and Limitations for Organic Material Emissions for Area Sources Proposed New 35 Ill. Adm. Code Part 223</u>, R08-17. The Agency further states that the Board has adopted the rule and published it in the *Illinois Register*. Mot. Add. at 1; *see* 33 Ill. Reg. 8224 (June 19, 2009).

The Agency states that, soon after publication of the adopted rule, it noted that the regulation included an error in the name of one category of coatings. Mot. Add. at 1; see 35 Ill. Adm. Code 223.205. Specifically, the coating labeled "Adhesives - Construction, Panel and Floor Contact" should instead be labeled "Adhesives - Construction, Panel and Floor Covering." Mot. Add. at 1. The Agency characterizes use of the word "contact" as "simply a typographical error." Mot. Add. at 2. The Agency notes that Section 223.203 defines the term "Construction, Panel and Floor Covering Adhesives." Id.; see 35 Ill. Adm. Code 223.203. The Agency thus argues that "changing the one word from 'contact' to 'covering' matches the category up exactly with the definition and the appropriate limit." Id.

The Agency further argues that its proposed change would make Part 223 more consistent with similar regulations in other jurisdictions. Mot. Add. at 2. The Agency argues that it considered manufacturers' and retailers' need for this consistency and had consistency as its goal in proposing Part 223. *Id.* The Agency further argues that "[c]orrecting this typographical error should have no substantial effect on regulated entities and should clear up any confusion about the category in the future." *Id.* 

The Agency states that it proposes this change because the record has closed in Board rulemaking docket R08-17. Mot. Add. at 1; see Standards and Limitations for Organic Material Emissions for Area Sources Proposed New 35 III. Adm. Code Part 223, R08-17 (May 7, 2009) (final opinion and order adopting rule). The Agency further states that it proposes no other change to Part 223. *Id.* The Agency requests that the Board grant its motion and allow it to propose a single change to one section of Part 223 in this rulemaking docket. *Id.* at 2.

As noted in the preceding subsection, Section 101.500(d) of the Board's procedural rules provides in pertinent part that, "[w]ithin 14 days after service of a motion, a party may file a response to the motion. If no response is filed, the party will be deemed to have waived objection to the granting of the motion, but the waiver of objection does not bind the Board or the hearing officer in its disposition of the motion." 35 Ill. Adm. Code 101.500(d). The Board has received no response to the Agency's motion to file *instanter* a request to add an amendment to Part 223. Based on its review of the Agency's motion, and in the absence of any response, the Board grants the motion and includes the proposed substitution of one word in its order below.

#### BACKGROUND ON FEDERAL AIR QUALITY STANDARDS

The Clean Air Act (CAA) establishes both primary and secondary air quality standards. TSD at 1. "Primary standards are limits for protecting public health, including the health of 'sensitive' populations (such as asthmatics, children, and the elderly). Secondary standards establish limits to protect the welfare of the public, which includes protection against decreased visibility, damage to buildings, crops, animals, and vegetation." *Id*.

The CAA requires that the United States Environmental Protection Agency (USEPA) establish National Ambient Air Quality Standards (NAAQS) for six criteria pollutants considered harmful to public health and the environment: ozone, particulate matter, sulfur dioxide, nitrogen dioxide, carbon monoxide, and lead. TSD at 1. "The CAA also requires that USEPA review, on a periodic basis, new scientific evidence about the effects of these pollutants on the public health and welfare and to revise the standards as appropriate." *Id.* USEPA has recently revised standards for ozone, particulate matter, and lead. *Id.* 

#### SUMMARY OF AGENCY'S ORIGINAL PROPOSAL

In its original proposal, the Agency states that it seeks simply to update Part 243 of the Board's air pollution regulation. SR at 1, 4; see 35 Ill. Adm. Code 243.101 et seq. The Agency further states that the Board originally adopted these regulations in order to satisfy requirements under the CAA. SR at 1-2. The Agency argues that recent action by the USEPA necessitates amending Illinois' rules. *Id.* at 2; see TSD at 1. The Agency argues that incorporation of new standards will have no real effect upon sources, as those standards are well-known to industry and are current federal law. *Id.* at 4.

Specifically, the Agency first states that its proposal reflects a new NAAQS for ozone and the revocation of the prior standard. SR at 2, citing 73 Fed. Reg. 16436 (Mar. 27, 2008); *see* TSD at 1. Second, the Agency indicates that the proposal reflects a number of recent changes to the NAAQS for particulate matter, which address both coarse particulate matter with a diameter

less than 10 micrometers (PM<sub>10</sub>) and fine particulate matter with a diameter less than 2.5 micrometers (PM<sub>2.5</sub>). SR at 2-3, citing 73 Fed. Reg. 1497 (Jan. 9, 2008), 71 Fed. Reg. 61144 (Oct. 17, 2006), 62 Fed. Reg. 38652 (July 18, 1997); *see* TSD at 1. Finally, the Agency also proposes amendments to regulations addressing definitions, nondegradation, and sulfur oxides. SR at 3. The Agency characterizes this last category of amendments as "several minor corrections" addressing typographical errors and placing citations in proper form. *Id*.

On a section-by-section basis below, the Board summarizes substantive amendments originally proposed by the Agency.

#### **Subpart A: General Provisions**

# **Section 243.107 Reference Conditions**

Section 243.107 now provides in its entirety that "[a]ll measurements of air quality are corrected to a reference temperature of 25° C, and to a reference pressure of 760 millimeters of mercury (1013.2 millibars)." 35 Ill. Adm. Code 243.107; see SR at 3, Prop. at 3. In its proposal, the Agency seeks to distinguish PM<sub>2.5</sub> from all other air quality measurements by providing that "PM<sub>2.5</sub> measurements shall be based upon the actual ambient air volume measured at the actual temperature and pressure at the monitoring site during the measurement period." Prop. at 3; see SR at 2-3.

#### **Section 243.108 Incorporations by Reference**

Section 243.108 now incorporates by reference seven specified materials. 35 Ill. Adm. Code 243.108; *see* Prop. at 4. The Agency first proposes to amend subsection (g), which incorporates Appendix K of 40 C.F.R. 50 providing interpretation of the NAAQS for particulate matter. 35 Ill. Adm. Code 243.108(g); *see* SR at 3, Prop. at 4. The Agency states that USEPA amended Appendix K in 2006 and proposes to update the incorporation with a citation to that amendment. Prop. at 4; *see* SR at 3, citing 73 Fed. Reg. 61144 (Oct. 17, 2006).

The Agency also proposes to incorporate three new materials. The first of them, Appendix L to 40 C.F.R. 50, "describes the reference method used for the determination of fine particulate matter as PM<sub>2.5</sub> in the atmosphere." SR at 2, citing 71 Fed. Reg. 61144 (Oct. 17, 2006); *see* Prop. at 4. The second, Appendix N to 40 C.F.R. 50, provides interpretation of the NAAQS for PM<sub>2.5</sub> and provides a calculation for determining the maximum 24-hour concentrations of it. SR at 2, citing 71 Fed. Reg. 61144 (Oct. 17, 2006); *see* Prop. at 4. The third, Appendix P to 40 C.F.R. 50, provides interpretation of the NAAQS for ozone and provides for measurement of its daily maximum 8-hour concentration. SR at 2, citing 73 Fed. Reg. 16436 (Mar. 27, 2008); *see* Prop. at 4.

#### **Subpart B: Standards and Measurement Methods**

#### **Section 243.120 PM-10**

Section 243.120 now provides ambient air quality standards for PM-10 expressed in terms of an annual arithmetic mean concentration and a maximum 24-hour concentration, "not to be exceeded more than once per year." 35 Ill. Adm. Code 243.120(a). The section also provides a measurement method for determining compliance with those standards and a reference to "[t]he computations necessary for analyzing particulate matter data to determine attainment. . . ." 35 Ill. Adm. Code 243.120(b), citing 40 C.F.R. 50, Appendices J, K.

The Agency first proposes to amend this section by changing each reference to "PM-10" to "PM<sub>10</sub>." *See* Prop. at 4-5. The Agency then notes that USEPA has recently amended the PM<sub>10</sub> standard. SR at 3, citing 73 Fed. Reg. 61144 (Oct. 17, 2006). Specifically, the Agency states that USEPA "revoked the annual PM<sub>10</sub> standard which had been calculated as the annual arithmetic mean concentration of 50 micrograms per cubic meter." SR at 3; *see* 35 Ill. Adm. Code 243.120(a)(1). The Agency proposes to amend the section to reflect this USEPA action. Prop. at 5. The Agency notes, however, that USEPA "left the daily PM<sub>10</sub> standard unchanged at a maximum 24-hour concentration of 150 micrograms per cubic meter, not to be exceeded more than once per year." SR at 3; *see* 35 Ill. Adm. Code 243.120(a)(2), Prop. at 5. The Agency proposes to re-codify that daily standard from subsection (a)(2) to subsection (a). Prop. at 5.

#### Proposed Section 243.120a PM<sub>2.5</sub>

The Agency proposes to add to Part 243 a new section addressing PM<sub>2.5</sub>. Prop. at 5; *see* SR at 2. The Agency notes that USEPA has "lowered the annual arithmetic mean concentration [of PM<sub>2.5</sub>] to 15 micrograms per cubic meter." SR at 2, citing 62 Fed. Reg. 38652 (July 18, 1997). The Agency proposes a new Section 243.120a(a)(1) reflecting this USEPA standard. Prop. at 5. The Agency states that USEPA more recently established "a maximum 24-hour concentration of 35 micrograms per cubic meter." SR at 2, citing 73 Fed. Reg. 61144 (Oct. 17, 2006). The Agency further states that this concentration is "to be calculated at the 98th percentile value, as determined by 40 C.F.R. Part 50, Appendix N." SR at 2. The Agency proposes language reflecting these USEPA actions. Prop. at 5 (proposed Section 243.120a(a)(2)). The Agency also provides a measurement method for determining compliance with these standards and a reference to "[t]he computations necessary for analyzing particulate matter to determine attainment. . . ." Prop. at 5 (proposed Section 243.120a(b), citing 40 C.F.R. 50, Appendices L, N).

#### Section 243.125 Ozone

Section 243.125 now provides ambient air quality standards for ozone expressed in terms of a "maximum 1-hour concentration not to be exceeded on more than one day per year." 35 Ill. Adm. Code 243.125(a). The section also provides a measurement method for determining compliance. 35 Ill. Adm. Code 243.125(b), citing 40 C.F.R. 50, Appendix D (1982).

The Agency first proposes to amend this section to reflect the new NAAQS for ozone. SR at 2. Specifically, the Agency seeks to revoke the one-hour standard and enact the new eighthour standard. SR at 2, citing 73 Fed. Reg. 16436 (Mar. 27, 2008); *see* Prop. at 7. That new standard for ozone is 0.075 parts per million (ppm) and is based on the fourth-highest daily eight-hour value recorded during a calendar year. SR at 2; *see* Prop. at 7. The Agency also specifies measurement methods for determining compliance with the standard. SR 2, citing 40 C.F.R. Part 50, Section 50.1 (2003), 40 C.F.R. 50, Appendix P, 73 Fed. Reg. 16436 (Mar. 27, 2008); *see* Prop. at 7.

#### AGENCY'S MOTION TO AMEND ITS PROPOSAL

On January 20, 2009, the Agency filed a motion to amend its rulemaking proposal. As noted above, the Board granted the motion in an order dated February 19, 2009.

In its motion, the Agency proposes to amend the proposal "to incorporate a new federal air quality standard for lead." Mot. Amend at 1; *see* 35 Ill. Adm. Code 243.126 (Lead). The Agency states that USEPA recently adopted a new NAAQS for lead. Mot. Amend at 2, citing 73 Fed. Reg. 66964 (Nov. 12, 2008). The Agency seeks to amend the standard to "0.15 micrograms per cubic meter, as determined as a maximum rolling three month average evaluated over a three year period and measured by the atomic absorption spectrometry or equivalent method as described in 40 C.F.R. Appendices G and Q." Mot. Amend at 2, 3; *see* TSD at 1. The Agency also proposes to amend the incorporations by reference at Section 243.108 in order to include the citation to the Federal Register codifying the new lead standard and the citation to the Code of Federal Regulations on measurement of ambient lead concentrations. Mot. Amend at 2-3, citing 40 C.F.R. 50, 51, 53, 58, Appendices G, Q; 73 Fed. Reg. 66964 (Nov. 12, 2008).

#### AGENCY TESTIMONY

In his testimony pre-filed for the first hearing on March 10, 2009, Mr. Kaleel stated that the Agency sought to amend Part 243 in order to "reflect revised NAAQS for ozone, particulate matter, and lead." Kaleel Test. at 1-2, citing 73 Fed. Reg. 66964 (Nov. 12, 2008) (lead); 73 Fed. Reg. 16436 (Mar. 27, 2008) (ozone); 71 Fed. Reg. 61144 (Oct. 17, 2006) (PM<sub>10</sub>, PM<sub>2.5</sub>); 62 Fed. Reg. 38652 (July 18, 1997) (PM<sub>2.5</sub>); see also SR at 1-3; TSD at 1-3.

At the first hearing, counsel for IERG noted that USEPA establishes NAAQS for specific pollutants and asked whether the Agency had performed any analysis of its own to determine whether different levels should be set for those standards in Illinois. Tr.1 at 9. Mr. Kaleel stated that the Agency relies on USEPA and had not performed an independent review of the federal standards. *Id.* Acknowledging that the standards for ozone and PM<sub>2.5</sub> have been appealed, Mr. Kaleel agreed that, if either of those standards changed as a result of appeal, the Agency would begin to incorporate those changes. *Id.* at 10. He also noted that, because the proposed primary and secondary standard are identical to one another, there is now no need to distinguish them from one another. *Id.* at 11; *see Errata* at 3, 5 (designating standard as "primary and secondary").

Counsel for IERG also noted that Agency had not proposed to adopt the 1997 one-hour ozone standard into Part 243, even though it was the subject of rulemaking activity and state implementation plans. Tr.1 at 12. Mr. Kaleel stated that, while he would have preferred to adopt the one-hour standard soon after it was adopted in 1997, it was under legal challenge for many years. *Id.* at 13. He noted that, even if that standard is not included in Part 243, Illinois has an obligation under federal law to address it. *Id.* 

Addressing the PM<sub>10</sub> standard, counsel for IERG noted that the Agency's proposal did not explicitly include the language of the federal standard at 40 C.F.R. 50.6(a). Tr.1 at 15-16; see Exh. 1 at 2. Mr. Kaleel opined that the Agency's proposal was consistent with the federal standard but expressed a willingness to offer any necessary clarifying language. *Id.* at 16 (noting operation of Appendix K); see Errata at 3 (amending Section 243.120(a)).

Addressing the PM<sub>2.5</sub> standard, counsel for IERG noted that the Agency's proposal refers to a standard of 15 micrograms per cubic meter while the federal standard is 15.0. Tr.1 at 16-17; see Exh. 1 at 3 (40 C.F.R. 50.7). IERG also claimed that it was "not immediately evident" whether Appendix N applied to demonstrating compliance with both the 24-hour and annual standards. Tr.1 at 17. Responding, Mr. Kaleel first acknowledged that, as a result of rounding issues, the difference between 15 and 15.0 "could conceivably have a substantive effect." *Id.* at 18. Accordingly, he indicated that the Agency "probably would intend to amend that." *Id.*; see Errata at 3. In addition, Mr. Kaleel stated that the Agency's "intent is for Appendix N to apply to both [24-hour and annual] standards, and that is consistent with the language in the federal standard." Tr.1 at 17; see Errata at 4.

Addressing the ozone standard, IERG questioned whether the Agency's proposal was consistent with the federal standard. Tr.1 at 19-20; *see* Exh. 1 at 4 (40 C.F.R. 50.10). Mr. Kaleel stated that the Agency intended that the two provisions match one another and would review them in that light. Tr.1 at 20; *see Errata* at 5.

With regard to the lead standard, Mr. Kaleel indicated that USEPA adopted a single primary and secondary standard. Tr.1 at 21. Also, IERG questioned why the Agency's proposal did not include Appendix R, which provides measurement methods. *Id.*, citing 73 Fed. Reg. 60752 (Nov. 12, 2008) (40 C.F.R. 50.16). Mr. Kaleel responded that the Agency would determine whether an amendment would be appropriate. Tr.1 at 22; *see Errata* at 5 (adding reference to Appendix R).

IERG also noted other state air quality standards that are not exactly consistent with the corresponding federal standard. IERG first claimed that there are "substantial differences" between the state and federal sulfur dioxide standards. Tr.1 at 22-23; *compare* Exh. 1 at 1-2 (40 C.F.R 50.4, 50.5) *and* 35 Ill. Adm. Code 243.122. Mr. Kaleel noted that the state sulfur dioxide standard has existed "for many years" and that all of Illinois attains both standards. Tr.1 at 23, 26. He stated that the Agency did not intend to amend the standard and was not proposing any change to it. *Id*.

IERG also noted that the federal and state carbon monoxide standards are not identical. *Id.* at 23-24; *compare* Exh. 1 at 3 (40 C.F.R. 50.8) *and* 35 Ill. Adm. Code 243.123. IERG stated

that the federal standard is expressed in ppm and the state standard is expressed in milligrams per cubic meter. Tr.1 at 23. Mr. Kaleel stated that the federal and state regulations refer to the standard in terms of both ppm and milligrams per cubic meter. *Id.* at 24. Mr. Kaleel testified that he didn't see a need to revise this language and that the Agency proposed no change to it. *Id.* 

Responding to an IERG question about the state nitrogen oxide standards, Mr. Kaleel stated that it had been in place "for a very long time" and that the Agency proposed no change to it. *Id.* at 25; *see* 40 C.F.R. 50.11, 35 Ill. Adm. Code 243.124. He indicated that, if USEPA amends those standards, "we will revisit those, but we don't intend to do so at this time." Tr.1 at 25.

#### **AGENCY'S ERRATA SHEET**

On April 14, 2009, the Agency filed its first *errata* sheet, which proposed amendments to the text of rules it had submitted to the Board. *Errata* at 1.

First, the Agency proposed to amend the table of contents of Part 243. *Errata* at 1-2. Noting that it had originally proposed to codify PM<sub>2.5</sub> standards in a new section numbered 120a, the Agency sought to "resolve any questions over the propriety of using an 'a' in a section number." *Id.* at 1; *see* Tr.1 at 18-19. Accordingly, the Agency struck the proposed Section 243.120a and simply incorporated the PM<sub>2.5</sub> provisions into the existing PM<sub>10</sub> provisions at Section 243.120. *Errata* at 3-4.

Second, the Agency sought to amend the incorporations by reference at Section 243.108 by adding 40 C.F.R. 50, Appendix R. *Errata* 1 at 2, 3; *see* Tr.1 at 22. The Agency argues that this amendment is necessary because of changes made to the NAAQS for lead. *Id.* at 2. The Agency states that "Appendix R to 40 C.F.R. 50 contains the Interpretation of the National Ambient Air Quality Standards for Lead." *Id.* 

Third, the Agency proposes to include language originally proposed as Section 243.120a as Sections 243.120(c) and (d). *Errata* at 3-4; *see* Tr.1 at 18-19. The Agency also amended language regarding both PM<sub>2.5</sub> and PM<sub>10</sub> in order to make it more consistent with the corresponding provisions of the Code of Federal Regulations. *Errata* at 3; *see* Tr.1 at 15-17.

Fourth, the Agency proposes to amend Section 243.125 addressing ozone "so that it more closely tracks the provisions in the Code of Federal Regulations, Part 50." *Errata* at 4-5. Fifth, the Agency also seeks to amend Section 243.126 addressing lead so that its language is more consistent with the provisions of the Federal Register. *Id.* at 5, citing 73 Fed. Reg. 16436 (Nov. 12, 2008); *see* Tr.1 at 19-20.

In his testimony on behalf of IERG at the second hearing, Mr. Kolaz stated that the *errata* sheet "is proposing changes that appear to better conform the Agency's proposed revisions to the USEPA's national ambient air quality standards in order to ensure that such standards are identical in substance." Tr.2 at 10.

#### **IERG TESTIMONY**

In pre-filed testimony on behalf of IERG, Mr. Kolaz recognized the Agency's stated purpose of amending Part 243 to conform to NAAQS. Kolaz Test. at 1, 2; see SR at 1-2, TSD at 1, Tr.1 at 8-9. Specifically, IERG noted that the Agency proposed to amend Illinois standards for ozone, particulate matter, and lead. Kolaz Test. at 2. In addition to those amendments proposed by the Agency, IERG offered proposed additional changes that "should be part of the clean up included in this rulemaking. *Id.; see* Exh. 4. Specifically, IERG states that "USEPA has also made changes to the air quality standards for sulfur dioxides, nitrogen dioxide and carbon monoxide prior to 1997, which should be addressed in this rulemaking." Kolaz Test. at 2.

The Board summarizes addresses Mr. Kolaz's testimony on behalf of IERG on each of these three proposed amendments in the subsections below.

# **Sulfur Oxides (Section 243.122)**

Mr. Kolaz argues that the federal and state sulfur oxides standards are "substantially different" from one another. Kolaz Test. at 2; *see id.*, Att. 1 (comparison). Although he acknowledges that USEPA has not modified the NAAQS for sulfur oxides since 1996, USEPA has made technical changes. *Id.*, citing 61 Fed. Reg. 25566 (May 22, 1996). IERG argues that these technical changes "must now be made to the Illinois sulfur oxide standard to avoid confusion and possible misinterpretation of the State standard." Kolaz Test. at 2; *see* Tr.2 at 32-33.

First, IERG states that USEPA has added language providing that "the block averaging convention will be retained." Kolaz Test. at 3, citing 61 Fed Reg. 25576 (May 22, 1996); *see* Kolaz Test., Att. 1, citing 40 C.F.R. 50.4; Tr. 2 at 11. IERG argues that USEPA explains this convention in the following terms: "[u]nder the block convention, periods such as 24 hours and 3 hours are measured sequentially and do not overlap; when one averaging period ends, the next begins." Kolaz Test. at 3, citing 61 Fed. Reg. 25576 (May 22, 1996). IERG further argues that USEPA has concluded that, "[g]iven a fixed standard level, the use of the alternative, running averages, would represent a tightening of the standards." Kolaz Test. at 3, citing 61 Fed. Reg. 25576 (May 22, 1996) (citations omitted). IERG claims that USEPA retained the block averaging convention after determining that "protection of the public health and welfare does not require tightening the existing standards. Therefore, [US]EPA will retain the block averaging convention for the 24-hour, 3-hour, and annual standards." Kolaz Test. at 3, citing 61 Fed. Reg. 25576 (May 22, 1996).

In his testimony on behalf of IERG at the second hearing, Mr. Kolaz addressed the difference between block averaging and running averages by discussing a single monitoring site. *See* Tr.2 at 11-12. He noted that the Agency "reports two exceedances of the State's 24-hour sulfur oxide standard at its Pekin monitoring site based on running averages rather than block averages." Tr.2 at 11, citing Exh. 2 (Table B8). He stated that "[t]wo exceedances represent a violation of both the state and federal air quality standards." Tr.2 at 11; *see* 40 C.F.R. 50.4(b), 35 Ill. Adm. Code 243.122. When these data were submitted to it, "the USEPA summarized the same data using block averages and concluded there was only one exceedance. Since one

exceedance does not constitute a violation according to both the federal and state sulfur oxide air quality standard, the USEPA concluded that the sulfur oxide standard was not violated in Pekin." Tr.2 at 12, citing Exh. 3. He argued that the three-hour averages reported by USEPA and the Agency also do not match "because of the discrepancy between block averages and running averages." Tr.2 at 12; *see* Exhs. 2, 3.

In response to questions at the second hearing, Mr. Kolaz indicated that initial methods for monitoring sulfur dioxide gathered only 24-hour samples and effectively allowed only block averaging. Tr.2 at 16. He acknowledged that, by the 1970s, monitoring technology improved and became sophisticated enough to collect smaller samples and allow smaller averaging times. *Id.* at 17. He agreed that, at about that time, the Agency began using running averages to interpret the sulfur dioxide standard and has continued to do so. *Id.* at 16, 36. He further agreed that, in determining compliance with air quality standards, the use of running averages is more stringent than block averages and is allowed by USEPA. *Id.* at 17-18. Nonetheless, he suggested that IERG's proposal would address vagueness that results from differences between the federal and state standards. *Id.* at 19, 26-28.

Second, IERG argues that USEPA has clarified the sulfur oxides standard by stating it in terms of ppm instead of micrograms per cubic meter. Kolaz Test. at 3, *see id*, Att. 1 (comparison), Tr.2 at 22. IERG notes that the Agency's 2007 Illinois Annual Air Quality Report expresses standards for pollutants including sulfur oxides in terms of ppm. *Id.*, *see* Exh. 2. IERG claims that "[t]here is no reason to continue to show the State standards in terms of micrograms per cubic meter. This can cause confusion and errors if the data are converted to micrograms per cubic meter, and then compared to the standard." Kolaz Test. at 3.

IERG elaborates that "[t]he number of significant digits of the sulfur oxides standard expressed as 365 micrograms per cubic meter provides a different result than the standard expressed as 0.14 parts per million." Kolaz Test. at 3; see Tr.2 at 24. IERG argues that, although a value of 366 micrograms per cubic meter would exceed the State sulfur oxides standard, that value converts to 0.138 ppm. Kolaz Test. at 4. IERG further argues that, if that converted figure is appropriately rounded to 0.14 ppm, it arguably satisfies the federal standard expressed in those terms. *Id.*; see Tr.2 at 21-22, 24. IERG claims that these conflicting conclusions led USEPA to express the sulfur oxides standards only in terms of ppm and that the Board should do the same in order to avoid possible confusion. Kolaz Test. at 4; Tr.2 at 22.

In response to questions at the second hearing, Mr. Kolaz acknowledged that the state standard is stricter than the federal standard, which is allowed under the Clean Air Act. Tr.2 at 25. Although he acknowledged that micrograms per cubic meter may be used for the purpose of modeling to prepare for an attainment demonstration, he suggests that state standard expressed in those terms does not compare exactly to the federal standard expressed in ppm. Tr. 2 at 23-24.

Third, IERG argues that USEPA has adopted clarifications regarding "rounding conventions and data completeness and handling conventions." Kolaz Test. at 4; *see id.*, Att 1 (comparison). IERG claims that the Agency "is incorporating these same types of details into the changes to the standards it is proposing. Therefore, it seems reasonable to take this opportunity to 'clean-up' the sulfur oxides standard as well." *Id.* IERG argues that these

amendments would make the state standards clearer. *Id.*; *see* Exh. 4 at 1-2 (proposing language for revisions of Section 243.122).

In his testimony on behalf of IERG at the second hearing, Mr. Kolaz addressed the issue of rounding conventions. He stressed that the Agency reports 0.004 ppm sulfur dioxide as the annual average at its Pekin monitoring location. Tr.2 at 13, citing Exh. 2. He states that, relying on the same data, USEPA reports a value of 0.005 ppm. Tr.2 at 13; see Exh. 3. Although acknowledging that this difference could result from an error, he states that it might be attributed to a rounding convention. Tr.2 at 13. He further states that "USEPA reports the annual average value as 0.0048 parts per million and then rounds it to 0.005 parts per million." *Id.* He argues that "[t]he rounding convention in the USEPA rule clearly illustrates how this is to be done, and no such convention exists in the current rule for sulfur oxides, nitrogen dioxide or carbon monoxide." *Id.* 

Also in his testimony, Mr. Kolaz agreed that the state had found that the state SO<sub>2</sub> standard had been exceeded at a monitoring site in Pekin. Tr.2 at 25. He indicated that a firm named Aventine, a member of IERG located in Pekin, has discussed these exceedances with the Agency. *Id.* Mr. Kolaz also agreed that, if the Agency interpreted the sulfur oxides standard as proposed by IERG, it would "affect the determination of whether or not the SO<sub>2</sub> standard was violated in Pekin." *Id.* at 26. However, he argues that the original intent of the state standard is to be identical to the federal standard. *Id.* at 27-28.

#### Nitrogen Dioxide (Section 243.124)

IERG notes that the current state nitrogen dioxide standard is expressed in terms of micrograms per cubic meter. Kolaz Test. at 4, citing 35 Ill. Adm. Code 243.124(a). IERG also notes that USEPA has amended the federal standard "to state the standard in terms of parts per million, and show the micrograms per cubic meter equivalent parenthetically." Kolaz Test. at 4; see id., Att. 2 (comparison). In addition, IERG states that the federal standard "includes the same type of rounding conventions and data completeness and handling conventions described for the sulfur oxides standard." Id. at 5. IERG favors amending the State standard to better conform to the federal standard, although it asks that the standard not be expressed in terms of micrograms per cubic meter. Id. IERG argues that this amendment reflects the Agency's own practice, as reflected in its 2007 Illinois Annual Air Quality Report. Id.; see Exh. 2; Tr.2 at 28.

In responding to questions at the second hearing, Mr. Kolaz acknowledged that preparation of attainment demonstrations may use micrograms per cubic meter. Tr.2 at 28-29. He also acknowledged that relying solely on ppm and incorporating the proposed rounding conventions would make the current form of the state standard less stringent. Tr.2 at 29

IERG also stresses that "USEPA is under a judicial consent decree that requires the USEPA to propose, by June 26, 2009, whether the nitrogen dioxide standards should be revised." Kolaz Test. at 5. IERG argues that USEPA must issue a final rule addressing this issue by January 22, 2010. *Id.* Although it acknowledges that such a rule may necessitate amendments to the federal regulation, "in the meantime, the State standard would better reflect the current status

if the changes IERG suggests are made." *Id.*; *see* Exh. 4 at 4 (proposing language for revisions of Section 243.124).

#### Carbon Monoxide (Section 243.123)

IERG notes that, while the federal carbon monoxide air quality standard is expressed in ppm and only parenthetically in milligrams per cubic meter, "[t]he Illinois standard is shown in terms of milligrams per cubic meter and parenthetically as parts per million." Kolaz Test. at 5-6; see 35 Ill. Adm. Code 243.123; Tr.2 at 29. IERG also notes that the federal standard includes "the same type of rounding conventions and data completeness and handling conventions described previously for the sulfur oxides and nitrogen dioxide standards." *Id.* at 5; see id., Att. 3, citing 40 C.F.R. 50.8.

IERG recommends that the Board amend the State standard to conform to the federal standard, "with the exception that the standard not be expressed in milligrams per cubic meter." Kolaz Test. at 6. IERG argues that this single exception "will better represent the current thinking of the USEPA as expressed in its air quality standard setting actions conducted since the time the carbon monoxide standard was last revised." *Id.*, *see* Tr.2 at 30-31 (supporting exception). IERG further argues that this amendment reflects the Agency's own practice, as reflected in its 2007 *Illinois Annual Air Quality Report* showing this standard in ppm. *Id.*; *see* Exh. 2; Exh. 4 at 3 (proposing language for revision of Section 243.123); Tr. 2 at 34.

In responding to questions at the second hearing, Mr. Kolaz acknowledged that modeling performed for the purpose of an attainment demonstration may use micrograms per cubic meter. Tr.2 at 30. However, he stated that "compliance with the standard is determined by monitoring, and monitoring uses parts per million." *Id.* Mr. Kolaz also agreed that relying solely on ppm and incorporating rounding conventions would make the state standard less stringent than its current form. *Id.* 

#### **Summary of IERG Testimony**

IERG expresses support for the steps taken by the Agency and the Board toward "cleaning-up" Illinois' air quality standards by making them more consistent with federal standards. Kolaz Test. at 6; *see* Tr.2 at 10. However, IERG favors additional amendments to the standards for sulfur oxides, nitrogen dioxide, and carbon monoxide as described above "to help avoid any possibility of misinterpretation." Kolaz Test. at 6; Tr.2 at 10, 13, 34; *see* Exh. 4.

#### **SUMMARY OF POST-HEARING COMMENTS**

#### **Agency's Corrected Comments (PC 3)**

The Agency states that it filed this rulemaking proposal to update certain air quality standards, including PM<sub>2.5</sub>, lead, 8-hour ozone, and 1-hour ozone, that had been amended through federal rulemaking. PC 3 at 1. The Agency's Statement of Reasons indicated that the proposal "has no real impact upon sources as it is currently federal law." *Id.* at 2, citing SR at 4. The Agency argues, however, that IERG's proposed language would have substantive effects,

including "that of relieving one of the members from liability by the Illinois EPA." PC 3 at 2. The Agency also argues that IERG' proposal would reverse a state policy of 30 years' duration and weaken state air quality standards. *Id.* The Agency suggests that amendments of this magnitude should require greater outreach and participation. *Id.* 

The Agency argues that it never intended to make every standard in Part 243 identical to the Code of Federal Regulations. *Id.* The Agency cites the testimony of Mr. Kaleel, who stated that the proposal intended only to adopt revised NAAQS promulgated by USEPA. PC 3 at 2, citing Kaleel Test. at 1-2. The Agency stresses Mr. Kaleel's testimony at the first hearing, during which he stated that the Agency intended no changes to the Part 243 standards for sulfur oxides, nitrogen dioxide, and carbon monoxide. PC 3 at 2-3, citing Tr.1 at 23-25.

The Agency specifically addresses IERG's proposal to change the averaging methodology for sulfur oxides from running averages to block averaging. The Agency argues that "[i]t has long been agreed that running averaging is slightly more stringent than block averaging." PC 3 at 4, citing PPG Indus. v. Costle, 659 F.2d 123, 1250 (D.C. Cir. 1981). Mr. Kolaz acknowledges that the Agency has required running averages for 30 years. PC 3 at 2, citing Tr. 2 at 15-18. The Agency suggests that a policy of this duration reflects some intent and that amending it would cause confusion. PC 3 at 2.

The Agency further argues that various authorities allow the use of running averages. The Agency claims that, even when USEPA guidance in 1986 indicated a preference that states use block averaging, it specifically stated that states could develop more stringent standards such as running averaging. PC 3 at 3-4, citing *Block Averages in Implementing SO<sub>2</sub> NAAQS*. The Agency also claims that courts have allowed both forms of averaging. PC 3 at 3, citing NRDC v. Thomas, 845 F.2d 1088, 1091 (D.C. Cir. 1988). The Agency further claims that USEPA has not proscribed running averaging. PC 3 at 4, citing 61 Fed. Reg. 2556 (May 22, 1996), 54 Fed. Reg. 23479-80 (June 1, 1989). The Agency concludes that it has consistently used running averaging in spite of litigation and debate at the federal level. PC 3 at 4. "Thus, there has never been any confusion in Illinois about what monitoring method is to be used for SO<sub>2</sub> or what would cause a violation of the SO<sub>2</sub> standard in Illinois." *Id*.

The Agency continues by noting that its Pekin monitoring station recorded two exceedances of the 24-hour SO<sub>2</sub> NAAQS. PC 3 at 4. The Agency claims that, "[u]sing running averages, these two exceedances constitute a violation of the NAAQS, but using block averages, they do not." *Id.* at 4-5. The Agency states that it has identified as the primary contributing source of the violation as Aventine, a Pekin company. *Id.* The Agency states that is now discussing a reduction of SO<sub>2</sub> emissions with Aventine. *Id.* The Agency argues that the change to block averaging proposed by IERG would relax the sulfur oxide standard for all sources and relieve Aventine of any obligation it might have to reduce its SO<sub>2</sub> emissions. *Id.* 

The Agency also addresses IERG's proposal regarding the numerical values used to express air quality standards. The Agency argues that removing values expressed as micrograms or milligrams per cubic meter would make the state's nitrogen dioxide and carbon monoxide standards different from the federal standards. PC 3 at 5. The Agency argues that this is inconsistent with IERG's proposal that the sulfur oxides standard be identical to the federal

standard. *Id.* The Agency requests that the Board retain values expressed in terms of micrograms or milligrams per cubic meter and in terms of ppm. *Id.* The Agency argues that "[b]oth units are used routinely." *Id.* While the Agency acknowledges that monitoring data is typically reported in terms of ppm, it states that modeling for permits under the Prevention of Significant Deterioration program and for attainment demonstrations is designed to calculate micrograms per cubic meter. *Id.* at 5-6.

Concluding, the Agency states that its proposal intends only to update Part 243 with new NAAQS and not to include substantive changes that states may impose in the exercise of their discretion. PC 3 at 6. The Agency requests that the Board decline to adopt IERG's suggestions for block averaging and for the units in which Part 243 expresses air quality standards. *Id.* The Agency further requests that the Board adopt the Agency's proposal for first notice. *Id.* 

#### IERG (PC 2)

IERG notes that the Agency has proposed to amend state air quality standards for particulate matter, ozone and lead in order to reflect federal standards for the same pollutants. PC 2 at 1, citing SR at 4. IERG further notes that the Agency has revised its proposal to follow those federal provisions more closely. PC 2 at 1-2; *see Errata*. IERG states that it "supports the desire of the Illinois EPA to adopt standards in Illinois that are identical in substance to the NAAQS." PC 2 at 2. IERG suggests that this desire is consistent with intent expressed in previous Agency and Board actions. *Id.*, citing Proposed Air Quality Standards, R72-7, slip op. at 4-5 (July 10, 1975). IERG states that it "supports the Agency's proposal, but would further encourage the Agency and the Board to take this opportunity to update the standards for sulfur oxides, nitrogen dioxide, and carbon monoxide as well." PC 2 at 2.

On a section-by-section basis below, the Board summarizes IERG's comments on each specific air quality standard it addresses.

#### **Section 243.120 PM<sub>10</sub> and PM<sub>2.5</sub>**

IERG suggests changes to the Agency's revised proposal. Specifically, regarding  $PM_{10}$  measurement methods in Section 243.120(b), IERG proposes replacing current language addressing the computations determining attainment with the following: "[t]he standards are attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter is equal to or less than one, as determined in accordance with" 40 C.F.R. 50, Appendix K. PC 2 at 3; see 35 Ill. Adm. Code 243.120(b).

Regarding  $PM_{2.5}$  measurement methods in Section 243.120(d), IERG proposes to add the following language: "[c]ompliance with the standards is determined using the methods and procedures described in 40 C.F.R. 50, Appendix N (incorporated by reference in Section 243.108)." PC 2 at 4; see 35 Ill. Adm. Code 243.120(d). In Section 243.120(d)(1), IERG proposes to replace the current language addressing the computations determining compliance with the following: "[t]he annual primary and secondary  $PM_{2.5}$  standards are met when the annual arithmetic mean concentration, as determined in accordance with 40 C.F.R. 50, Appendix N, is less than or equal to 15.0  $\mu$ g/m³." PC 2 at 4; see 35 Ill. Adm. Code 243.120(c)(1), (d)(1).

IERG also proposes to add a new Section 243.120(d)(2) providing in its entirety that "[t]he 24-hour primary and secondary PM<sub>2.5</sub> standards are met when the 98th percentile 24-hour concentration, as determined in accordance with 40 C.F.R. 50, Appendix N of this part, is less than or equal to 35  $\mu$ g/m<sup>3</sup>." PC 2 at 4; *see* 35 Ill. Adm. Code 243.120(c)(2).

#### Section 243.122 Sulfur Oxides

IERG states that, when the Board adopted Illinois' current sulfur oxides standard in 1975, it stated that they were "identical to the federal standards." PC 2 at 5, citing Proposed Air Quality Standards, R72-7, slip op. at 14 (July 10, 1975); see 35 Ill. Adm. Code 243.122. IERG further states that a USEPA review "determined that revisions of the standards were not warranted, other than several minor technical changes." PC 2 at 5, citing 61 Fed. Reg. 25566 (May 22, 1996). IERG identifies these changes as "restating the primary and secondary standards in terms of parts per million rather than micrograms per cubic meter, adding explicit rounding conventions, and specifying data completeness and handling conventions." PC 2 at 6. IERG argues that USEPA intended "to retain the block averaging convention for the 24-hour, annual, and 3-hour standards. . . ." *Id.*, citing 61 Fed. Reg. 25576 (May 22, 1996).

IEPA acknowledges that, while Illinois' sulfur oxides standard is expressed in terms of micrograms per cubic meter, it is also expressed parenthetically in ppm. PC 2 at 6. IERG states, however, that the standard should "be stated solely in terms of parts per million to be consistent with, and improve understanding of, U.S. EPA's 1996 determination." *Id.* IERG argues that, because the two units of measurement differ in the number of significant digits, the application of rounding conventions "can result in misinterpretation of data." *Id.* IERG further argues that, "for the purpose of its own data handling, the Agency measures, interprets, and reports sulfur dioxide data in terms of parts per million." *Id.* IERG also discounts the Agency's apparent concern that expressing the standard in ppm would jeopardize its modeling program. IERG claims that "[t]he modeling program is a planning tool and is not a recognized protocol for determining compliance with the air quality standards. Whether the State's air quality standards are expressed in parts per million or micrograms per cubic meter should have no impact on the Agency's ability to conduct modeling." *Id.* 

IERG states that the sulfur oxides rule should address the rounding convention. PC 2 at 7. IERG argues that USEPA "amended its rule to clarify that the convention -- to three decimal places (fractional parts equal to or greater than 0.0005 ppm shall be rounded up) -- is applicable to the primary annual sulfur oxide NAAQS." *Id.*, citing 40 C.F.R. 50.4(a, b), 50.5(a). IERG claims that applying this convention will clarify the rule, avoid the risk of confusion, and "result in the codification of the method the Agency currently uses." PC 2 at 7.

IERG also states that USEPA has also clarified the sulfur oxide NAAQS by "specifying data completeness and data handling criteria." PC 2 at 7. IERG argues that federal regulations provide "that at least 18 of 24 hourly values must be available to compute a 24 hour average" and that specify "how missing data and other similar issues are to be handled." *Id.*, citing 40 C.F.R. 50.4(d). IERG claims that adopting these conventions "would simply formalize the current practice the Agency follows." PC 2 at 7.

IERG states the USEPA has also addressed the issue of whether to apply block averaging or running averages. IERG cites USEPA's statement that, "[a]lthough the wording of the original 24-hour, 3-hour, and annual SO<sub>2</sub> standards was ambiguous on the matter, the earliest actions of the EPA signify that the block averaging convention was intended for these standards (OAQPS, 1986), and block averages have generally been used in implementing the standards." PC 2 at 7-8, citing 58 Fed. Reg. 58958 (Nov. 15, 1994). IERG argues that USEPA has clarified the NAAQS by providing that "24-hour averages shall be determined from successive nonoverlapping 24-hour blocks starting at midnight each calendar day. . . ." PC 2 at 8, citing 40 C.F.R. 50.4(b). IERG further argues that USEPA employs a similar averaging periods for annual and 3-hour standards. PC 2 at 8.

IERG assets that Illinois' sulfur oxides standard is "ambiguous' on the issue of averaging time. PC 2 at 8. IERG indicates that, while the Agency interprets data using running average time periods, USEPA relies upon block averages. *Id.*, citing Tr.2 at 11-14; Exhs. 2, 3; Kolaz Test. at 2-3. IERG argues that USEPA explicitly recognizes that applying running averages in place of block averages "would represent at tightening of the standards. . . ." *Id.*, citing 61 Fed. Reg. 25576 (May 22, 1996). While IERG acknowledges that states may adopt regulations more stringent than federal requirements, it suggests that the Agency has not explicitly sought or justified a more stringent state standard based on running averages. *See* PC 2 at 8-9.

# Section 243.123 Carbon Monoxide

IERG notes that, when USEPA last amended its carbon monoxide standard, it expressed it in terms of ppm and only parenthetically in terms of micrograms per cubic liter. PC 2 at 10, citing 50 Fed. Reg. at 37501 (Sept. 13, 1985). IERG states that that amendment "also updated the standard to include data completeness and handling criteria." PC 2 at 10. IERG acknowledges that the revision did not refer to block averages but states that USEPA "uses a running non-overlapping approach to interpreting compliance with the 8-hour standard." *Id.* IERG requests that this standard be expressed only in terms of ppm, that it include the rounding convention, data completeness, and data handling elements of the federal rule, and that it specify "that the 8-hour standard is determined using non-overlapping running averages." *Id.* 

#### Section 243.124 Nitrogen Dioxide

IERG states that USEPA last updated the nitrogen dioxide standard in 1985. PC 2 at 9, citing 50 Fed. Reg. 25544 (June 19, 1985). IERG further states that "[t]he standard includes block averaging, rounding convention, and data completeness and handling methodologies similar in concept" to provisions applicable to sulfur oxides. PC 2 at 9. IERG also states that USEPA expresses the standard in terms of ppm and only parenthetically in terms of micrograms per cubic meter. *Id.* IERG notes that, "[i]n stating the parts per million standard, the U.S. EPA included an additional significant digit, expressing it as 0.053, instead of 0.05, parts per million." *Id.* 

IERG emphasizes that the Agency's air quality reports employ a ppm standard. PC 2 at 9, citing Tr.2 at 29, Kolaz Test. at 4-5. IERG requests that the Board amend the nitrogen dioxide standard by stating it solely in ppm. PC 2 at 9. IERG argues that the parenthetical reference to

micrograms per liter "does nothing to add clarity" and is inconsistent with USEPA's practice of relying solely on standards expressed in terms of ppm. *Id.* at 9-10, citing 73 Fed. Reg. 16436 (Mar. 27, 2008) (ozone standard); 62 Fed. Reg. 38856 (July 18, 1997) (8-hour ozone NAAQS); 61 Fed. Reg. 25566 (May 22, 1996) (sulfur oxides). IERG concludes that expressing Illinois' standard solely in terms of ppm "will not create a substantive inconsistency between the State and federal standards." PC 2 at 10.

#### Section 243.125 Ozone

On measurement methods for the 8-hour ozone standards in Section 243.125(b), IERG proposes to replace current language addressing conformance with the standard with the following: "[t]he primary and secondary ambient air quality standards are met when the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.075 ppm, as determined using" 40 C.F.R. 50, Appendix P." PC 2 at 4; see 35 Ill. Adm. Code 243.125(b).

#### Section 243.126 Lead

IERG proposes to amend the current lead standard under Section 243.126(a) so that it provides in its entirety that "[t]he primary and secondary ambient air quality standards for lead and its compounds are 0.15 micrograms per cubic meter, maximum arithmetic mean over a rolling three calendar month period measured and determined over a three year period." PC 2 at 5; see 35 Ill. Adm. Code 243.126(a). IERG also proposes to amend Section 243.126(b) regarding measurement methods for determining conformance with the standards so that it provides in its entirety that,

[f]or determining compliance with the ambient air quality standards for lead and its compounds, lead and its compounds shall be measured by a reference method based on 40 C.F.R. 50, Appendix G or Appendix Q and designated in accordance with 40 C.F.R. 53 or an equivalent method designated in accordance with 40 C.F.R. 53, as incorporated by reference in Section 243.108 of this Part. The primary and secondary ambient air quality standards are met when the maximum arithmetic 3-month mean concentration for a 3-year period is less than or equal to 0.15 micrograms per cubic meter as determined in accordance with 40 C.F.R. 50, Appendix R incorporated by reference in Section 243.108 of this Part. PC 2 at 5; see35 Ill. Adm. Code 243.126(b).

#### **Summary**

IERG states that it supports the Agency's update of the Board air quality standards. PC 2 at 11. IERG favors additional amendments to the sulfur oxides, nitrogen dioxide, and carbon monoxide regulations with the intent of making the federal and state regulations conform more closely to one another. *Id.* at 11, 12. IERG argues that its proposed additional amendments "will afford the public and the regulated community a much clearer understanding of the State's air quality standards." *Id.* at 11. Although IERG acknowledges that its proposal would require the Agency to adopt block averaging for interpreting the sulfur oxides standards, IERG claims

that its proposal "more accurately reflects the methods and techniques that the Agency uses to interpret the standards." *Id*.

#### **Agency E-mail (PC 4)**

In e-mail to the hearing officer, the Agency on August 31, 2009, forwarded an electronic message from counsel for IERG. PC 4. The original message noted that Section 217.388(a)(2)(B) of the Board's regulations includes a cross-reference to a non-existent Section 217.386(a)(1)(B) that should instead refer to Section 217.386(a)(2). PC 4; *see* 35 III. Adm. Code 217.386, 217.388(a)(2)(B). The comment surmised that the regulations incorrectly applied a reorganization of Section 217.388 to the reference to Section 217.386. PC 4. The Agency acknowledged that the adopted Section 217.388(a)(2)(B) included that error and asked how the error could be most easily corrected. *Id*.

#### **DISCUSSION**

#### **Section 217.388**

Above under "Summary of Post-Hearing Comments," the Board noted an Agency comment concurring with IERG that this section includes an incorrect cross-reference. *See* 35 Ill. Adm. Code 217.388(a)(2)(B); *supra* at 19-20. Having reviewed that provision, the Board concurs that it includes a cross-reference to a provision that does not exist and that the comment proposes the appropriate correction. Accordingly, the Board finds that this docket updating the air regulations should include that correction offered in the comment and proposes it for first notice as suggested. *See supra* at 19-20.

#### **Section 223.205**

Above under "Preliminary Issues," the Board granted the Agency's motion to add a proposed amendment to Part 223 for consideration in this docket. *Supra* at 4-5; *see* 35 Ill. Adm. Code 223.205(a)(2); *see generally* Mot. Add. The Agency seeks to amend the name of the category "Adhesives -- Construction, Panel and Floor Contact" so that it corresponds to the adopted definition of the term "Adhesives -- Construction, Panel and Floor Covering Adhesives." *See* 35 Ill. Adm. Code 223.203 (definitions), 223.205(a)(2), Mot. Add.

The Board concurs with the Agency's view that this proposed amendment would make Part 223 more consistent with regulations adopted in other jurisdictions. *See* Proposed New 35 Ill. Adm. Code 223 Standards and Limitations for Volatile Organic Material Emissions from Area Sources, R8-17, slip op at 34-35 (Oct. 16, 2008) (addressing source of Agency proposal in first-notice opinion and order). The Board also concurs with the Agency's claim that correcting this inconsistency between the name of the category and the adopted definitions "should have no substantial effect on regulated entities and should clear up any confusion about the category in the future." Mot. Add at 2. The Board finds that the Agency's proposed amendment would clarify its VOM emissions regulations and proposes it for first notice as suggested by the Agency.

#### Part 243 Subpart A: General Provisions

In Subpart A, the Agency proposes a number of amendments, some of which simply correct typographical errors or correct citations. *See* SR at 3; Prop. at 2, 3. The Agency has also proposed to amend Section 243.107 addressing reference conditions to provide for the measurement of PM<sub>2.5</sub>. *See* SR at 2-3; Prop. at 3. Finally, the Agency proposed to amend Section 243.108 to update material incorporated by reference and to incorporate new materials pertaining to PM<sub>2.5</sub>, ozone, and lead by reference. Prop. at 4, Mot. Amend at 2-3, *Errata* at 2-3. The Board finds that the record does not persuasively dispute these proposed amendments and that they correct, clarify, and update these regulations. The Board proposes the amendments as offered by the Agency for first notice.

#### Part 243 Subpart B: Standards and Measurement Methods

#### **Section 243.120 PM-10**

The Agency's original proposal sought to amend the heading of this section and to incorporate recent federal amendments to the standard for both PM<sub>10</sub> and PM<sub>2.5</sub>. Prop. at 4-5; SR at 2-3 (citations omitted). The Agency also sought to adopt a measurement method for determining compliance with the PM<sub>2.5</sub> standard. Prop. at 5. The Agency's *errata* sheet responded to questions at the first hearing by seeking to make this provision more consistent with the federal standard. *Errata* at 3-4; *see* Tr.1 at 12-17.

In its post-hearing comment, IERG suggests further amendment. PC 2 at 3-4. While IERG largely accepts the language offered in the Agency's *errata* sheet, it proposes to amend subsection (b) regarding demonstrating attainment of the PM<sub>10</sub> standard through 40 C.F.R. 50, Appendix K. PC 2 at 3. Specifically, IERG proposes that subsection (b) provide in its entirety that,

[f]or determining conformance with the PM<sub>10</sub> ambient air quality standards, PM<sub>10</sub> shall be measured by a method described in 40 CFR 50, Appendix J (incorporated by reference in Section 243.108). The standards are attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter is equal to or less than one, as determined in accordance with 40 CFR 50, Appendix K (incorporated by reference in Section 243.108). *Id*.

IERG also offer amendments to the Agency's proposed subsection (d). Specially, IERG propose that subsection (d) provide in its entirety as follows:

d) PM<sub>2.5</sub> Measurement Method. For determining conformance with the PM<sub>2.5</sub> ambient air quality standards, PM<sub>2.5</sub> shall be measured by the method described in 40 CFR 50, Appendix L (incorporated by reference in Section 243.108). Compliance with the standards is determined using the methods and procedures described in 40 CFR 50, Appendix N (incorporated by reference in Section 243.108).

- The annual primary and secondary  $PM_{2.5}$  standards are met when the annual arithmetic mean concentration, as determined in accordance with 40 CFR 50, Appendix N, is less than or equal to  $15.0 \,\mu\text{g/m}^3$ .
- 2) The 24-hour primary and secondary  $PM_{2.5}$  standards are met when the 98th percentile 24-hour concentration, as determined in accordance with 40 CFR 50, Appendix N of this Part, is less than or equal to 35  $\mu$ g/m<sup>3</sup>.

The Board concludes that IERG's proposed language clarifies these provisions without significant substantive revision. In its order below, the Board proposes this language for first-notice publication. The Board invites comment from the Agency and other participant on the issue of this amendment to Section 243.120(b).

#### Section 243.122 Sulfur Oxides (Sulfur Dioxide)

The Agency's original proposal included only a single technical correction in this section. Prop. at 6; *see also* Mot. Amend; *Errata*. In his testimony on behalf of the Agency at the first hearing, Mr. Kaleel indicated that the state standard has not been amended "for many years." Tr. 1 at 23. He continued that "it's not our intent to revise that at this time." *Id.* He further stated that the Agency intended to amend Illinois' regulations only to reflect revised NAAQS promulgated by USEPA. Kaleel Test. at 1 (noting revised NAAQS for ozone, particulate matter, and lead); *see* PC 3 at 1. Mr. Kolaz's testimony states that the last federal revision of this standard took place in 1996. Kolaz Test. at 2.

IERG has emphasized that, while the state standard is expressed in terms of micrograms per cubic meter and only parenthetically in ppm, the federal standard is stated only in terms of ppm. PC 2 at 6, Kolaz Test. at 3, Tr. 2 at 22. IERG also argues the state standard should include a rounding convention and provisions for data completeness and data handling. PC 2 at 7, Kolaz Test. at 4. IERG also claims that the state standard should interpret data using block averaging rather than running average time periods. PC 2 at 8, Kolaz Test. at 3.

Regarding the amendments to the sulfur oxides standard proposed by IERG, the record identifies only a single affected source, Aventine, and does not estimate any economic impact of the proposed amendments. *See* 415 ILCS 5/27(b) (2008); 35 Ill. Adm. Code 102.202(b). The record also does not clearly project the environmental impact of these provisions. The Agency has, for example, argued that the application of block averaging is less stringent than running averaging. PC 3 at 3-4. Citing IERG's reference to Aventine, the Agency suggests that block averaging would relax the standard for all sources and would obviate emission reductions. Furthermore, the Agency has stressed that it uses data expressed in terms of micrograms per cubic meter is making attainment demonstrations. Accordingly, the Board declines to propose the language suggested by IERG for first-notice publication.

#### Section 243.123 Carbon Monoxide

The Agency's original proposal included no revision to this section. Prop. at 6; *see also* Mot. Amend, *Errata*. In his testimony on behalf of the Agency at the first hearing, Mr. Kaleel stated that "it's not our intent to revise the carbon monoxide standard." Tr.1 at 24. He further stated that the Agency intended to amend Illinois' regulations only to reflect revised NAAQS promulgated by USEPA. Kaleel Test. at 1 (noting revised NAAQS for ozone, particulate matter, and lead); *see* PC 3 at 1.

In his testimony on behalf of IERG, Mr. Kolaz noted that, while the federal standard for carbon monoxide is expressed in terms of ppm and only parenthetically in terms of micrograms per cubic meter, the state standard is stated in terms of micrograms per cubic meter and only parenthetically in terms of ppm. Kolaz Test. at 5-6, Tr.2 at 29. He recommended that the Board provide the standard only in terms of ppm. Kolaz Test. at 6. IERG also argues that the Board should incorporate the rounding convention, data completeness, and data handling provisions of the federal rule. IERG also proposed that compliance with the standard be determined through non-overlapping running averages. PC 2 at 10.

Regarding the amendments to the carbon monoxide standard proposed by IERG, the record does not clearly identify sources that may be affected or estimate any economic impact of the amendments upon them. *See* 415 ILCS 5/27(b) (2008); 35 Ill. Adm. Code 102.202(b). The record also does not clearly project the environmental impact of these provisions, and the Agency has, for example, argued that the application of block averaging is less stringent than running averaging. Accordingly, the Board declines to propose the language by IERG for first-notice publication.

#### Section 243.124 Nitrogen Dioxide

The Agency's original proposal included no revision to this section. Prop. at 7; *see also* Mot. Amend, *Errata*. In his testimony on behalf of the Agency at the first hearing, Mr. Kaleel indicated that "[w]e are not making changes to nitrogen dioxide." Tr.1 at 25. He continued that the existing standards "have existed for a very long time, and at such time U.S. EPA revises those standards, we will revisit those, but we don't intend to do those at this time." *Id.* Mr. Kaleel's pre-filed testimony stated that the Agency intended to amend Illinois' regulations only to reflect revised NAAQS promulgated by USEPA. Kaleel Test. at 1 (noting revised NAAQS for ozone, particulate matter, and lead); *see* PC 3 at 1.

In his testimony on behalf of IERG, Mr. Kolaz noted that, while the federal standard for nitrogen dioxide is expressed in terms of ppm and only parenthetically in terms of micrograms per cubic meter, the state standard is stated in terms of micrograms per cubic meter. Kolaz Test. at 4; *see* PC 2 at 9. IERG recommends that the Board provide the nitrogen dioxide standard only in terms of ppm. PC 2 at 9 6. IERG also notes that the federal standard incorporates a rounding convention and data completeness and data handling provisions. Kolaz Test. at 5; PC 2 at 9.

Regarding the amendments to the nitrogen dioxide standard proposed by IERG, the record does not clearly identify sources that may be affected or estimate any economic impact of

the amendments upon them. *See* 415 ILCS 5/27(b) (2008); 35 III. Adm. Code 102.202(b). The record also does not clearly project the environmental impact of these provisions, and IERG has acknowledged that relying solely on a ppm standard and adopting the proposed rounding convention would result in a less stringent regulation. Accordingly, the Board declines to propose the language by IERG for first-notice publication.

#### Section 243.125 Ozone

The Agency's original proposal sought to incorporate the new federal 8-hour ozone standard, adopt a measurement method for determining compliance with it, and revoke the 1-hour standard. SR at 2 (citations omitted); Prop. at 7. The Agency's *errata* sheet proposed changes intended to make this section more consistent with the federal standard. *Errata* at 4-5; *see* Tr.1 at 19-20.

In its post-hearing comment, IERG suggests further amendment. PC 2 at 4. While IERG largely accepts the Agency's *errata* with regard to subsection (a), it proposes to amend subsection (b) regarding demonstrating attainment of the 8-hour ozone standard through 40 C.F.R. 50, Appendix P. *Id.* Specifically, IERG proposes that subsection (b) provide in its entirety that

[o]zone shall be measured by a reference method specified by 40 CFR Part 50, Appendix D, or an equivalent method as described in 40 CFR Part 50, Section 50.1, all designated as prescribed by 40 CFR Part 53 (2003). The primary and secondary ambient air quality standards are met when the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.075 ppm, as determined using 40 CFR 50, Appendix P (incorporated by reference in Section 243.108). PC 3 at 4.

The Board concludes that IERG's proposed language clarifies this provision without significant substantive revision. In its order below, the Board proposes this language for first-notice publication. The Board invites comment from the Agency and other participant on the issue of this amendment to Section 243.125.

#### Section 243.126 Lead

Although the Agency's original proposal suggested only a small number of non-substantive changes to this section, its motion to amend filed on June 8, 2009, sought to replace the existing lead standard and measurement method with the new standard and measurement. Prop. at 7-8; Mot. Amend at 1, 3, citing 73 Fed. Reg. 66964 (Nov. 12, 2008). The Agency's *errata* sheet sought to make the proposal more consistent with the revised federal standard. *Errata* at 5, citing 73 Fed. Reg. 66964 (Nov. 12, 2008); *see* Tr.1 at 20-21.

In its post-hearing comments, IERG suggests additional amendments. PC 2 at 5. However, IERG does not support these suggestions with technical support, evidence or arguments identifying affected sources, or projected economic or environmental impact. While

the Board accordingly declines to adopt the revisions offered, it invites comment by the participants on this provision.

#### **Technical Feasibility and Economic Reasonableness**

As noted above under "Procedural History," the Board in a letter dated December 19, 2008, requested that DCEO determine whether it would conduct an economic impact study of the Agency's rulemaking proposal. *See* 415 ILCS 5/27(b) (2008). DCEO did not respond to the Board's request. At the second hearing, the hearing officer noted the Board's request to DCEO and the absence of a response to it. Tr.2 at 37. Although the hearing officer afforded those present an opportunity to testify regarding the request, no participant offered testimony regarding that issue. *See id.* at 37-38.

In its Statement of Reasons, the Agency addressed the issues of technical feasibility and economic reasonableness with a statement providing in its entirety that

[t]he amendments to Part 243 do not impose new requirements, they merely update the State's regulations to reflect current federal law and standards. The Illinois EPA therefore believes that an analysis of technical feasibility and economic reasonableness is not appropriate. These standards are well known to industry and have been thoroughly discussed by the U.S. EPA. SR at 4.

For the reason stated in the preceding subsections, the Board has proposed for first-notice publication language reflecting the Agency's general intent to adopt revised NAAQS promulgated by USEPA into Part 243. The Board has declined to propose language that was not suggested by the Agency and that raised questions about identifying potentially affected sources and projecting economic and environmental impacts. Accordingly, the Board concurs with the Agency that the proposal in its order below reflects current federal law and that compliance with it is both technically feasible and economically reasonable. As the proposed amendments to Parts 217 and 223 provide only clarifying technical corrections, the Board concludes that those elements of the proposal are also technically feasible and economically reasonable.

#### **CONCLUSION**

The Board below proposes to update air quality standards in Part 243 of its regulations and to adopt a technical correction in both Part 217 and Part 223. In its order below, the Board directs the Clerk to cause first-notice publication of the Board's proposal in the *Illinois Register*, which commences a 45-day public comment period.

#### **ORDER**

The Board directs the Clerk to cause first-notice publication of the following proposed amendments to the Board's regulations in the *Illinois Register*. Proposed additions are underlined, and proposed deletions appear stricken.

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

# PART 217 NITROGEN OXIDES EMISSIONS SUBPART A: GENERAL PROVISIONS

Section 217.100 217.101 217.102 217.103 217.104	Scope and Organization Measurement Methods Abbreviations and Units Definitions Incorporations by Reference SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES
Section	
217.121	New Emission Sources (Repealed)
	SUBPART C: EXISTING FUEL COMBUSTION EMISSION UNITS
Section	
217.141	Existing Emission Units in Major Metropolitan Areas
	SUBPART D: NO <sub>x</sub> GENERAL REQUIREMENTS
Section	
217.150	Applicability
217.152	Compliance Date
217.154	Performance Testing
217.155	Initial Compliance Certification
217.156	Recordkeeping and Reporting
217.157	Testing and Monitoring
217.158	Emissions Averaging Plans
	SUBPART E: INDUSTRIAL BOILERS
Section	
217.160	Applicability
217.162	Exemptions
217.164	Emissions Limitations
217.165	Combination of Fuels
217.166	Methods and Procedures for Combustion Tuning

# SUBPART F: PROCESS HEATERS

Section 217.180 217.182 217.184 217.185 217.186	Applicability Exemptions Emissions Limitations Combination of Fuels Methods and Procedures for Combustion Tuning	
	SUBPART G: GLASS MELTING FURNANCES	
Section 217.200 217.202 217.204	Applicability Exemptions Emissions Limitations	
	SUBPART H: CEMENT AND LIME KILNS	
Section 217.220 217.222 217.224	Applicability Exemptions Emissions Limitations	
SUBPART I: IRON AND STEEL AND ALUMINUM MANUFACTURING		
Section 217.240 217.242 217.244	Applicability Exemptions Emissions Limitations	
	SUBPART K: PROCESS EMISSION SOURCES	
Section 217.301	Industrial Processes	
	SUBPART M: ELECTRICAL GENERATING UNITS	
Section 217.340 217.342 217.344 217.345	Applicability Exemptions Emissions Limitations Combination of Fuels	

SUBPART O: CHEMICAL MANUFACTURE

#### Section 217.381 Nitric Acid Manufacturing Processes SUBPART Q: STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES AND TURBINES Section 217.386 **Applicability** 217.388 Control and Maintenance Requirements 217.390 **Emissions Averaging Plans** 217.392 Compliance 217.394 **Testing and Monitoring** 217.396 Recordkeeping and Reporting SUBPART T: CEMENT KILNS Section 217.400 **Applicability Control Requirements** 217.402 **Testing** 217.404 Monitoring 217.406 217.408 Reporting 217.410 Recordkeeping SUBPART U: NO<sub>x</sub> CONTROL AND TRADING PROGRAM FOR SPECIFIED NOx GENERATING UNITS Section 217.450 Purpose Severability 217.452 **Applicability** 217.454 **Compliance Requirements** 217.456 **Permitting Requirements** 217.458 217.460 Subpart U NO<sub>x</sub> Trading Budget Methodology for Obtaining NO<sub>x</sub> Allocations 217.462 Methodology for Determining NO<sub>x</sub> Allowances from the New Source Set-Aside 217.464 NO<sub>x</sub> Allocations Procedure for Subpart U Budget Units 217.466 217.468 New Source Set-Asides for "New" Budget Units Early Reduction Credits (ERCs) for Budget Units 217.470 Low-Emitter Requirements 217.472 **Opt-In Units** 217.474 **Opt-In Process** 217.476 217.478 Opt-In Budget Units: Withdrawal from NO<sub>x</sub> Trading Program

Opt-In Units: Change in Regulatory Status

Allowance Allocations to Opt-In Budget Units

217.480

217.482

# SUBPART V: ELECTRIC POWER GENERATION

Section	
217.521	Lake of Egypt Power Plant
217.700	Purpose
217.702	Severability
217.704	Applicability
217.706	Emission Limitations
217.708	NO <sub>x</sub> Averaging
217.710	Monitoring
217.712	Reporting and Recordkeeping

# SUBPART W: $NO_x$ TRADING PROGRAM FOR ELECTRICAL GENERATING UNITS

Section	
217.750	Purpose
217.751	Sunset Provisions
217.752	Severability
217.754	Applicability
217.756	Compliance Requirements
217.758	Permitting Requirements
217.760	NO <sub>x</sub> Trading Budget
217.762	Methodology for Calculating NO <sub>x</sub> Allocations for Budget Electrical Generating
	Units (EGUs)
217.764	NO <sub>x</sub> Allocations for Budget EGUs
217.768	New Source Set-Asides for "New" Budget EGUs
217.770	Early Reduction Credits for Budget EGUs
217.774	Opt-In Units
217.776	Opt-In Process
217.778	Budget Opt-In Units: Withdrawal from NO <sub>x</sub> Trading Program
217.780	Opt-In Units: Change in Regulatory Status
217.782	Allowance Allocations to Budget Opt-In Units

# SUBPART X: VOLUNTARY NO<sub>x</sub> EMISSIONS REDUCTION PROGRAM

Section	
217.800	Purpose
217.805	Emission Unit Eligibility
217.810	Participation Requirements
217.815	NO <sub>x</sub> Emission Reductions and the Subpart X NO <sub>x</sub> Trading Budget
217.820	Baseline Emissions Determination
217.825	Calculation of Creditable NO <sub>x</sub> Emission Reductions
217.830	Limitations on NO <sub>x</sub> Emission Reductions
217.835	NO <sub>x</sub> Emission Reduction Proposal
217.840	Agency Action

217.845	<b>Emissions De</b>	etermination Methods
217.850	Emissions Mo	onitoring
217.855	Reporting	
217.860	Recordkeepin	ng -
217.865	Enforcement	
Section 217.A	APPENDIX A	Rule into Section Table
Section 217.A	APPENDIX B	Section into Rule Table
Section 217.A	APPENDIX C	Compliance Dates
Section 217.A	APPENDIX D	Non-Electrical Generating Units
Section 217.A	APPENDIX E	Large Non-Electrical Generating Units
Section 217.A	APPENDIX F	Allowances for Electrical Generating Units
Section 217.A	APPENDIX G	Existing Reciprocating Internal Combustion Engines Affected by
the NO <sub>x</sub> SIP (	Call	
Section 217.A	APPENDIX H	Compliance Dates for Certain Emissions Units at Petroleum
Refineries		

Authority: Implementing Sections 9.9 and 10 and authorized by Sections 27 and 28 of the Environmental Protection Act [415 ILCS 5/9.9, 10, 27 and 28].

Source: Adopted as Chapter 2: Air Pollution, Rule 207: Nitrogen Oxides Emissions, R71-23, 4 PCB 191, April 13, 1972, filed and effective April 14, 1972; amended at 2 Ill. Reg. 17, p. 101, effective April 13, 1978; codified at 7 Ill. Reg. 13609; amended in R01-9 at 25 Ill. Reg. 128, effective December 26, 2000; amended in R01-11 at 25 Ill. Reg. 4597, effective March 15, 2001; amended in R01-16 and R01-17 at 25 Ill. Reg. 5914, effective April 17, 2001; amended in R07-18 at 31 Ill. Reg. 14254, effective September 25, 2007; amended in R07-19 at 33 Ill. Reg. 11999, effective August 6, 2009; amended in R08-19 at 33 Ill. Reg. 13345, effective August 31, 2009; amended in R09-20 at 33 Ill. Reg. 15754, effective November 2, 2009; amended in R09-19 at 35 Ill. Reg. \_\_\_\_\_\_, effective \_\_\_\_\_\_.

#### **Section 217.388 Control and Maintenance Requirements**

- a) On and after the applicable compliance date in Section 217.392, an owner or operator of an affected unit must inspect and maintain affected units as required by subsection (a)(4) of this Section and comply with one of the following: the applicable emissions concentration as set forth in subsection (a)(1) of this Section, the requirements for an emissions averaging plan as specified in subsection (a)(2) of this Section, or the requirements for operation as a low usage unit as specified in subsection (a)(3) of this Section.
  - Limits the discharge from an affected unit into the atmosphere of any gases that contain  $NO_x$  to no more than:
    - A) 150 ppmv (corrected to 15 percent O<sub>2</sub> on a dry basis) for sparkignited rich-burn engines;

- B) 210 ppmv (corrected to 15 percent O<sub>2</sub> on a dry basis) for sparkignited lean-burn engines, except for existing spark-ignited Worthington engines that are not listed in Appendix G;
- C) 365 ppmv (corrected to 15 percent O<sub>2</sub> on a dry basis) for existing spark-ignited Worthington engines that are not listed in Appendix G:
- D) 660 ppmv (corrected to 15 percent O<sub>2</sub> on a dry basis) for diesel engines;
- E) 42 ppmv (corrected to 15 percent O<sub>2</sub> on a dry basis) for gaseous fuel-fired turbines; and
- F) 96 ppmv (corrected to 15 percent O<sub>2</sub> on a dry basis) for liquid fuelfired turbines.
- Complies with an emissions averaging plan as provided for in either subsection (a)(2)(A) or (a)(2)(B) of this Section:
  - A) For any affected unit identified by Section 217.386: The requirements of the applicable emissions averaging plan as set forth in Section 217.390; or
  - B) For units identified in Section 217.386(a)(2)(1)(B): The requirements of an emissions averaging plan adopted pursuant to any other Subpart of this Part. For such affected engines and turbines the applicable requirements of this Subpart apply, including, but not limited to, calculation of NO<sub>x</sub> allowable and actual emissions rates, compliance dates, monitoring, testing, reporting, and recordkeeping.
- Operates, for units not listed in Appendix G, the affected unit as a low usage unit pursuant to subsection (a)(3)(A) or (a)(3)(B) of this Section. Low usage units that are not part of an emissions averaging plan are not subject to the requirements of this Subpart Q except for the requirements to inspect and maintain the unit pursuant to subsection (a)(4) of this Section, test as required by Section 217.394(f), and retain records pursuant to Section 217.396(b) and (d). Either the limitation in subsection (a)(3)(A) or (a)(3)(B) may be utilized at a source, but not both:
  - A) The potential to emit (PTE) is no more than 100 TPY NO<sub>x</sub> aggregated from all engines and turbines located at the source that are not otherwise exempt pursuant to Section 217.386(b), and not complying with the requirements of subsection (a)(1) or (a)(2) of

- this Section, and the NO<sub>x</sub> PTE limit is contained in a federally enforceable permit; or
- B) The aggregate bhp-hrs/MW-hrs from all affected units located at the source that are not exempt pursuant to Section 217.386(b), and not complying with the requirements of subsection (a)(1) or (a)(2) of this Section, are less than or equal to the bhp-hrs and MW-hrs operation limit listed in subsections (a)(3)(B)(i) and (a)(3)(B)(ii) of this Section. The operation limits of subsections (a)(3)(B)(i) and (a)(3)(B)(ii) of this Section must be contained in a federally enforceable permit, except for units that drive a natural gas compressor located at a natural gas compressor station or storage facility. The operation limits are:
  - i) 8 mm bhp-hrs or less on an annual basis for engines; and
  - ii) 20,000 MW-hrs or less on an annual basis for turbines.
- 4) Inspects and performs periodic maintenance on the affected unit, in accordance with a Maintenance Plan that documents:
  - A) For a unit not located at natural gas transmission compressor station or storage facility, either:
    - i) The manufacturer's recommended inspection and maintenance of the applicable air pollution control equipment, monitoring device, and affected unit; or
    - ii) If the original equipment manual is not available or substantial modifications have been made that require an alternative procedure for the applicable air pollution control device, monitoring device, or affected unit, the owner or operator must establish a plan for inspection and maintenance in accordance with what is customary for the type of air pollution control equipment, monitoring device, and affected unit.
  - B) For a unit located at a natural gas compressor station or storage facility, the operator's maintenance procedures for the applicable air pollution control device, monitoring device, and affected unit.
- b) Owners and operators of affected units may change the method of compliance with this Subpart, as follows:
  - 1) When changing the method of compliance from subsection (a)(3) of this Section to subsection (a)(1) or (a)(2) of this Section, the owner or operator

must conduct testing and monitoring according to the requirements of Section 217.394(a) through (e), as applicable. For this purpose, references to the "applicable compliance date" in Section 217.394(a)(2) and (a)(3) shall mean the date by which compliance with subsection (a)(1) or (a)(2) of this Section is to begin.

- 2) An owner or operator of an affected unit that is changing the method of compliance from subsection (a)(1) or (a)(2) of this Section to subsection (a)(3) of this Section must:
  - A) Continue to operate the affected unit's control device, if that unit relied upon a  $NO_x$  emissions control device for compliance with the requirements of subsection (a)(1) or (a)(2) of this Section; and
  - B) Prior to changing the method of compliance to subsection (c) of this Section, complete any outstanding initial performance testing, subsequent performances testing or monitoring as required by Section 217.394(a), (b), (c), (d) or (e) for the affected unit. If the deadline for such testing or monitoring has not yet occurred (e.g., the five-year testing or monitoring sequence has not yet elapsed), the owner or operator must complete the test or monitoring prior to changing the method of compliance to subsection (a)(3) of this Section. After changing the method of compliance to subsection (a)(3) of this Section, no additional testing or monitoring will be required for the affected unit while it is complying with subsection (a)(3) of this Section, except as provided for in Section 217.394(f).

(Source: Amended at 35 Ill. Reg.\_\_\_\_\_, effective \_\_\_\_\_)

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

# PART 223 STANDARDS AND LIMITATIONS FOR ORGANIC MATERIAL EMISSIONS FOR AREA SOURCES

SUBPART A: GENERAL PROVISIONS

Section	
223.100	Severability
223.105	Abbreviations and Acronyms
223.120	Incorporations by Reference

# SUBPART B: CONSUMER AND COMMERCIAL PRODUCTS

Section	
223.200	Purpose
223.201	Applicability
223.203	Definitions for Subpart B
223.205	Standards
223.206	Diluted Products
223.207	Products Registered under FIFRA
223.208	Requirements for Aerosol Adhesives
223.209	Requirements for Floor Wax Strippers
223.210	Products Containing Ozone-Depleting Compounds
223.220	Requirements for Charcoal Lighter Material
223.230	Exemptions
223.240	Innovative Product Exemption
223.245	Alternative Compliance Plans
223.250	Product Dating
223.255	Additional Product Dating Requirements
223.260	Most Restrictive Limit
223.265	Additional Labeling Requirements for Aerosol Adhesives, Adhesive Removers,
	eaners, Electrical Cleaners, Energized Electrical Cleaners, and Contact Adhesives
223.270	Reporting Requirements
223.275	Special Recordkeeping Requirements for Consumer Products that Contain
Perchloroethy	vlene or Methylene Chloride
223.280	Calculating Illinois Sales
223.285	Test Methods

# SUBPART C: ARCHITECTURAL AND INDUSTRIAL MAINTENANCE COATINGS

Section	
223.300	Purpose
223.305	Applicability
223.307	Definitions for Subpart C
223.310	Standards
223.320	Container Labeling Requirements
223.330	Reporting Requirements
223.340	Compliance Provisions and Test Methods
223.350	Alternative Test Methods
223.360	Methacrylate Traffic Coating Markings
223.370	Test Methods

AUTHORITY: Implementing Section 10 and authorized by Sections 27 and 28 of the Environmental Protection Act [415 ILCS 5/10, 27 and 28].

SOURCE: Adopted in R08-17 at 33 Ill. Reg. 8224, effective June 8, 2009.

#### Section 223.205 Standards

6)

Antiperspirants

a) Except as provided in Section 223.207, 223.230, 223.240, or 223.245, no person shall sell, supply, offer for sale, or manufacture for sale in Illinois any consumer product manufactured on or after July 1, 2009 that contains VOMs in excess of the limits specified in this subsection:

#### **Affected Product** % VOM by Weight Adhesives – Spray 1) A) Mist Spray 65 B) Web Spray 55 Special Purpose Spray Adhesives C) i) Mounting, Automotive Engine Compartment, and Flexible Vinyl 70 Polystyrene Foam and Automotive ii) Headliner 65 iii) Polyolefin and Laminate Repair /Edgebanding 60 2) Adhesives – Construction, Panel and Floor Covering Contact 15 Adhesives – General Purpose 10 3) 4) Adhesives – Structural Waterproof 15 5) Air Fresheners A) Single-Phase Aerosol 30 Double Phase Aerosol B) 25 Liquids / Pump Sprays 18 C) D) Solids / Gel 3

	A)	Aerosol	40 HY 10 M	VOM VOM
	B)	Non-Aerosol	0 HV 0 MV	
7)	Auton	45		
8)	Auton	notive Rubbing or Polishing Compound		17
9)	Automotive Wax, Polish, Sealant, or Glaze			
	A)	Hard Paste Waxes		45
	B)	Instant Detailers		3
	C)	All Other Forms		15
10)	Auton	notive Windshield Washer Fluids		35
11)	Bathro	oom and Tile Cleaners		
	A)	Aerosol		7
	B)	All Other Forms		5
12)	Bug a	nd Tar Remover		40
13)	Carburetor or Fuel-Injection Air Intake Cleaners 45			45
14)	Carpet and Upholstery Cleaners			
	A)	Aerosol		7
	B)	Non-Aerosol (Dilutables)		0.1
	C)	Non-Aerosol (Ready-to-Use)		3.0
15)	Charcoal Lighter Material see Section 223.220			23.220
16)	Cooking Spray – Aerosol 18			18
17)	Deodorants			
	A)	Aerosol	0 10	HVOM MVOM

	B)	Non-Aerosol	0 0	HVOM MVOM
18)	Dusti	ng Aids		
	A)	Aerosol		25
	B)	All Other Forms		7
19)	Engir	ne Degreasers		
	A)	Aerosol		35
	B)	Non-Aerosol		5
20)	Fabri	c Protectants		60
21)	Floor	Polishes / Waxes		
	A)	Products for Flexible Flooring Materia	ls	7
	B)	Products for Nonresilient Flooring		10
	C)	Wood Floor Wax		90
22)	Floor	Wax Strippers s	ee Section 2	23.209
23)	Furniture Maintenance Products			
	A)	Aerosol		17
	B)	All Other Forms Except Solid or Paste		7
24)	Gene	ral Purpose Cleaners		
	A)	Aerosol		10
	B)	Non-Aerosol		4
25)	Gene	ral Purpose Degreasers		
	A)	Aerosol		50
	B)	Non-Aerosol		4

26)	Glass Cleaners		
	A)	Aerosol	12
	B)	Non-Aerosol	4
27)	Hair	Mousses	6
28)	Hairs	shines	55
29)	Hairs	55	
30)	Hair	6	
31)	Heav	yy Duty Hand Cleaner or Soap	8
32)	Insec	eticides	
	A)	Crawling Bug (Aerosol)	15
	B)	Crawling Bug (All Other Forms)	20
	C)	Flea and Tick	25
	D)	Flying Bug (Aerosol)	25
	E)	Flying Bug (All Other Forms)	35
	F)	Foggers	45
	G)	Lawn and Garden (Aerosol)	20
	H)	Lawn and Garden (All Other Forms)	3
	I)	Wasp and Hornet	40
33)	Laun	ndry Prewash	
	A)	Aerosols / Solids	22
	B)	All Other Forms	5
34)	Laun	ndry Starch Products	5
35)	Meta	al Polishes / Cleansers	30

36)	Multi-Purpose Lubricant (Excluding Solid or Semi-Solid Products)	50	
37)	Nail Polish Removers		
38)	Non-Selective Terrestrial Herbicide - Non-Aerosol		
39)	Oven Cleaners		
	A) Aerosols / Pump Sprays	8	
	B) Liquids	5	
40)	Paint Removers or Strippers	50	
41)	Penetrants		
42)	Rubber and Vinyl Protectants		
	A) Aerosol	10	
	B) Non-Aerosol	3	
43)	Sealants and Caulking Compounds	4	
44)	Shaving Creams 5		
45)	Silicone-Based Multi-Purpose Lubricants (Excluding Solid or Semi-Solid Products)  60		
46)	Spot Removers		
	A) Aerosol	25	
	B) Non-Aerosol	8	
47)	Tire Sealants and Inflators	20	
48)	Undercoatings – Aerosols	40	

b) No person shall sell, supply, offer for sale, or manufacture for sale in Illinois, on or after July 1, 2009, any antiperspirant or deodorant that contains any compound listed below:

Benzene

	Ethylene Dibromide
	Ethylene Dichloride
	Hexavalent Chromium
	Asbestos
	Cadmium (metallic cadmium and cadmium compounds)
	Carbon Tetrachloride
	Trichloroethylene
	Chloroform
	Vinyl Chloride
	Inorganic Arsenic
	Nickel (metallic nickel and inorganic nickel compounds)
	Perchloroethylene
	Formaldehyde
	1,3-Butadiene
	Inorganic Lead
	Dibenzo-p-dioxins and dibenzofurans chlorinated in the 2,3,7 and 8 positions and containing 4,5,6 or 7 chlorine atoms
(Source: A	mended at 35 III. Reg, effective).

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	Preamble
243.103	Applicability
243.104	Nondegradation
243.106	Monitoring
243.107	Reference Conditions
243.108	Incorporations by Reference

#### SUBPART B: STANDARDS AND MEASUREMENT METHODS

Section	
243.120	<u>PM<sub>10</sub> and PM<sub>2.5</sub>PM-10</u>
243.121	Particulates (Repealed)
243.122	Sulfur Oxides (Sulfur Dioxide)
243.123	Carbon Monoxide
243.124	Nitrogen Dioxide
243.125	8 Hour Ozone
243.126	Lead
Appendix A	Rule into Section Table
Appendix B	Section into Rule Table

Appendix C Past Compliance Dates

AUTHORITY: Implementing Section 10 and authorized by Section 27 and 28 of the Environmental Protection Act [415 ILCS 5/10, 27, and 28].

#### **SUBPART A: GENERAL PROVISIONS**

#### **Section 243.101 Definitions**

- a) Except as hereinafter stated and unless a different meaning of a term is clear from its context, the definitions of terms used in this Part shall be the same as those used in the Environmental Protection Act (Ill. Rev. Stat. 1981, ch. 111 1/2, pars. 1001 et seq.) (Act).
- b) All terms which appear in this Part have the definitions specified by Parts 201 or 211 of this <u>SubtitleChapter</u>.

(Source amended at 35 Ill. Reg, effective)
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#### **Section 243.104 Nondegradation**

Existing ambient air quality which is better than the <u>established</u> ambient air quality standards at the date of their adoption will be maintained in its present high quality. Such ambient air quality shall not be lowered unless and until it is proved to the Illinois Environmental Protection Agency (Agency) that such change is justifiable as a result of necessary economic and social development and will not interfere with or become injurious to human health or welfare.

(Source amended at 35 Ill. Reg.\_\_\_\_\_, effective \_\_\_\_\_).

#### **Section 243.106 Monitoring**

Pollution levels will be determined by fixed or mobile sampling stations beyond the premises on which a source is located. Stations will be located according to the <u>guidelines</u> for established monitoring networks as developed by the United States Environmental Protection Agency.

(Source amended at 35 Ill. Reg.\_\_\_\_\_, effective \_\_\_\_\_).

#### **Section 243.107 Reference Conditions**

All measurements of air quality, except  $PM_{2.5}$ , are corrected to a reference temperature of 25° C, and to a reference pressure of 760 millimeters of mercury (1013.2 millibars).  $PM_{2.5}$  measurements shall be based upon the actual ambient air volume measured at the actual temperature and pressure at the monitoring site during the measurement period.

(Source: Amended at 35 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:

- a) Pararosaniline method, 40 CFR 50, Appendix A (1982).
- b) Non-dispersive infrared spectrometry technique, 40 CFR 50, Appendix C (1982), 36 Fed. Reg. 22391, November 25, 1971.
- c) Colorimetric method, 36 Fed. Reg. 22396, November 25, 1971.
- d) Ozone-ethylene reaction method, 40 CFR 50, Appendix D (1982), 36 Fed. Reg. 22392, November 25, 1971.

- e) Lead, 40 CFR 50, <u>Appendices G and Q (2008)</u>. <del>Appendix G (1982)3 Fed. Reg. 46258, October 5, 1978, as amended at 44 Fed. Reg. 37915, June 29, 1979; 46 Fed. Reg. 44163, September 3, 1981</del>.
- f) Reference method for the determination of particulate matter as PM-<sub>10</sub> in the atmosphere, 40 CFR 50, Appendix J (1990).
- g) Interpretation of the national ambient air quality standards for particulate matter, 40 CFR 50, Appendix K, 73 Fed. Reg. 61144 (October 17, 2006). (1990)
- h) Reference method for the determination of particulate matter as PM<sub>2.5</sub> in the atmosphere, 40 CFR 50, Appendix L, 73 Fed. Reg. 61144 (October 17, 2006).
- i) Interpretation of the national ambient air quality standards for PM<sub>2.5</sub>, 40 CFR 50, Appendix N, 73 Fed. Reg. 1497 (January 9, 2008).
- j) <u>Interpretation of the NAAQS for O<sub>3</sub>, 40 CFR 50, Appendix P, 73 Fed. Reg. 16436</u> (March 27, 2008).
- k) National Ambient Air Quality Standards for Lead; Final Rule, 40 CFR 50, 51, 53, and 58, 73 Fed. Reg. 66964 (November 12, 2008).
- Interpretation of the National Ambient Air Quality Standards for Lead, 40 CFR
   50, Appendix R, 73 Fed. Reg. 66964 (November 12, 2008).

(	(Source: A	Amended	at 35	Ill. Reg.	. effective	`

#### SUBPART B: STANDARDS AND MEASUREMENT METHODS

#### Section 243.120 PM<sub>10</sub> and PM<sub>2.5</sub>PM-10

- a) PM<sub>10</sub> Standards. The <u>primary and secondary</u> ambient air quality standards for PM<sub>10</sub> PM10 are a maximum 24-hour average concentration of 150 micrograms per cubic meter. The standards are attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter is equal to or less than one, as measured and determined in accordance with subsection (b) below.
  - 1) An annual arithmetic mean concentration of 50 micrograms per cubic meter; and
  - 2) A maximum 24-hour concentration of 150 micrograms per cubic meter, not to be exceeded more than once per year.
- b)  $\underline{PM_{10}}$  Measurement Method. For determining conformance with the  $\underline{PM_{10}}$   $\underline{PM-10}$  ambient air quality standards,  $\underline{PM_{10}}$   $\underline{PM-10}$  shall be measured by  $\underline{athe}$  method

described in 40 CFR 50, Appendix J (incorporated by reference in Section 243.108). The standards are attained when the expected number of days per calendar year with a 24-hour average concentration above 150 micrograms per cubic meter is equal to or less than one, as determined in accordance with The computations necessary for analyzing particulate matter data to determine attainment of the PM<sub>10</sub>PM-10 standards are described in 40 CFR 50, Appendix K (incorporated by reference in Section 243.108).

- <u>e)</u> <u>PM<sub>2.5</sub> Standards. The primary and secondary ambient air quality standards for PM<sub>2.5</sub> are:</u>
  - 1) An annual arithmetic mean concentration of 15.0 micrograms per cubic meter; and as measured and determined in conformance with subsection (d) below.
  - 2) A maximum 24-hour concentration of 35 micrograms per cubic meter, at the 98th percentile value, and as measured and determined in conformance with subsection (d) below.
- d) PM<sub>2.5</sub> Measurement Method. For determining conformance with the PM<sub>2.5</sub> ambient air quality standards, PM<sub>2.5</sub> shall be measured by the method described in 40 CFR 50, Appendix L (incorporated by reference in Section 243.108).

  Compliance with the standards is determined using the methods and procedures described in 40 CFR 50, Appendix N (incorporated by reference in Section 243.108).
  - The annual primary and secondary  $PM_{2.5}$  standards are met when the annual arithmetic mean concentration, as determined in accordance with 40 CFR 50, Appendix N, is less than or equal to 15.0  $\mu$ g/m<sup>3</sup>.
  - 2) The 24-hour primary and secondary  $PM_{2.5}$  standards are met when the 98th percentile 24-hour concentration, as determined in accordance with 40 CFR 50, Appendix N, is less than or equal to  $35 \mu g/m^3$ .

(Source: Amended at Ill. Reg. 35\_\_\_\_\_, effective \_\_\_\_\_).

#### Section 243.122 Sulfur Oxides (Sulfur Dioxide)

- a) Primary Standards. The primary ambient air quality standards for sulfur oxides measured as sulfur dioxide are:
  - 1) An annual arithmetic mean concentration of 80 micrograms per cubic meter (0.03 ppm); and,
  - 2) A maximum 24-hour concentration not to be exceeded more than once per year of 365 micrograms per cubic meter (0.14 ppm).

- b) Secondary Standard. The secondary ambient air quality standard for sulfur oxides measured as sulfur dioxide is a maximum 3-hour concentration not to be exceeded more than once per year of 1,300 micrograms micorgrams per cubic meter (0.5 ppm).
- c) Measurement Method. For determining conformance with sulfur oxide air quality standards, sulfur oxides shall be measured as sulfur dioxide by the pararosaniline method described in 40 CFR 50, <u>Appendix App.</u> A, (1982), or by an equivalent method of proof approved by the Agency.

(Source: Amended at Ill. Reg. 35\_\_\_\_\_, effective \_\_\_\_).

#### Section 243.125 8-HourOzone

- a) Standard. The <u>primary and secondary</u> ambient air quality <u>standardsstandard</u> for ozone <u>areis 0.0750.12 parts per million</u> (ppm) (235 micrograms per cubic meter) <u>daily maximum 8-hour1-hour average</u> concentration, measured and determined in <u>accordance with subsection (b) belownot to be exceeded on more than one day per year.</u>
- b) Measurement Method. For determining conformance with the ozone air quality standard, ozoneOzone shall be measured by athe ozone ethylene reactionreference method specified bydescribed in 40 CFR Part 50, AppendixApp. D, as amended or an equivalent method as described in 40 CFR Part 50, Section 50.1, all designated as prescribed by 40 CFR Part 53 (2003). The primary and secondary ambient air quality standards are met when the 3-year average of the annual fourth-highest daily maximum 8-hour average ozone concentration is less than or equal to 0.075 ppm, as determined using 40 CFR Part 50, Appendix P (incorporated by reference in Section 243.108).

(Source: Amended at III. Reg. 35, effective).

#### Section 243.126 Lead

- a) Standard. The <u>primary and secondary</u> ambient air quality standards for lead <del>and its compounds are 1.5</del> is 0.15 micrograms per cubic meter, <u>maximum rolling three month average measured and determined over a three-year periodarithmetic mean average over a calendar quarter.</u>
- b) Measurement Method. For determining conformance with the ambient air quality standards for lead and its compounds, lead and its compounds shall be measured by the atomic absorbtion spectrometry or equivalent method as described in 40 CFR 50 Appendices App. G (1982) and Q, as incorporated by reference in Section 243.108 of this Part. The primary and secondary ambient air quality standards

shall be determined in accordance with A	ppendix R of Part 50	0 as incorporated by
reference in Section 243.108 of this Part.	**	

(Source: Amended at Ill. Reg. 35\_\_\_\_\_\_, effective \_\_\_\_\_).

IT IS SO ORDERED.

I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on November 4, 2010, by a vote of 5-0.

John T. Therriault, Assistant Clerk

Illinois Pollution Control Board