

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)

STANDARDS AND LIMITATION FOR)
CERTAIN SOURCES OF LEAD: PROPOSED)
35 ILL. ADM. CODE 226)

NOTICE

TO: James Therriault
Assistant Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph St., Suite 11-500
Chicago, IL 60601-3218

Office of Legal Counsel
Illinois Department of Natural Resources
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Chief
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Office of the Attorney General
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Joyce Morales-Caramella
Mayco Industries, Inc.
18 West Oxmoor Road
Birmingham, AL 35209

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board the RULEMAKING PROPOSAL entitled "STANDARDS AND LIMITATIONS FOR CERTAIN SOURCES OF LEAD: PROPOSED 35 ILL. ADM. CODE 226", MOTION FOR WAIVER OF COPY REQUIREMENTS, AND APPEARANCE of the Illinois Environmental Protection Agency, a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By Sally A. Carter
Sally A. Carter
Assistant Counsel
Division of Legal Counsel

DATED: November 12, 2013

1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276
217/782-5544

**THIS FILING IS SUBMITTED
ON RECYCLED PAPER**

14-19
R15-
(Rulemaking - Air)
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Pollution Control Board

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Pollution Control Board

***THIS IS A
FAST TRACK
RULEMAKING***

**FILED IN ACCORDANCE WITH
SECTION 28.5 OF THE ENVIRONMENTAL
PROTECTION ACT (415 ILCS 5/28.5)**

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
STANDARDS AND LIMITATIONS FOR) R13-
CERTAIN SOURCES OF LEAD: PROPOSED) (Rulemaking – Air)
35 ILL. ADM. CODE 226)

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40 CFR 51, Appendix M, Method 204.

Gutow, B., *An Inventory of Iron Foundry Emissions*, Prepared for Air Pollution Control Office, Environmental Protection Agency, (Under Contract CPA 22-60-106), January 1972.

Illinois Environmental Protection Agency. Modeling Data for Part 226, Standards and Limitations for Certain Sources of Lead. Bureau of Air, Air Quality Planning Section, Springfield, IL, 2013.

Technical Support Document for Control of Lead Emissions from Nonferrous Metal Production Facilities in Lead Nonattainment Areas, AQPSTR 13-07, Illinois Environmental Protection Agency, October 2013



TRC Environmental Corporation. *Assessment of Fugitive Lead Emissions from the Electric Furnace Building, H. Kramer & Co., Chicago, Illinois*, June 26, 2012.

TRC Environmental Corporation. *Assessment of Fugitive Lead Emissions from the South Foundry Building, H. Kramer & Co., Chicago, Illinois*, June 2012.

U.S. Environmental Protection Agency. *Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources*, AP-42, Fifth Edition, Pages 12.17-1 – 12.17-4. January 1995.

U.S. Environmental Protection Agency, *Implementation of the 2008 Lead National Ambient Air Quality Standards, Guide to Developing Reasonably Available Control Measures (RACM) for Controlling Lead Emissions*, (EPA-457/R-12-001). March 2012.

United States of America and State of Illinois v. H. Kramer & Co., U.S. Dist. Ct., Northern District, Civil Action No. 13 CV 0771, Consent Decree, December 24, 2012.

Illinois Environmental Protection Act (415 ILCS 5/*et seq.*)

Clean Air Act (42 U.S.C. 7401 *et seq.*)

Incorporations by reference:

75 FR 71033-01, Air Quality Designations for the 2008 Lead (Pb) National Ambient Air Quality Standards (Tuesday, November 22, 2010).

76 FR 72097-01, Air Quality Designations for the 2008 Lead (Pb) National Ambient Air Quality Standards (Tuesday, November 22, 2011).

40 CFR 60, Appendix A, Method 29 (2012).

40 CFR 60, Appendix A, Method 1, 1A (2012).

40 CFR 60, Appendix A, Method 2, 2A, 2C, and 2D (2012).

40 CFR 60, Appendix A, Method 3, 3A (2012).

40 CFR 60, Appendix A, Method 4 (2012).

40 CFR 60, Appendix A, Method 12 (2012).

U.S. Environmental Protection Agency. Emission Measurement Center Guideline Document (GD-042). *Preparation and Review of Site-Specific Emission Test Plans*, Revised March 1999.

40 CFR 260.11(c)(3)(v) and 261, Method 1311 (2012).

Occupational Safety & Health Administration. OSHA Method 1006. Methods Development Team, Industrial Hygiene Chemistry Division, OSHA Salt Lake Technical Center, Sandy, UT 84070-6406, (801) 233-4900, January 2005.

12. Certificate of Service
13. First Notice Forms
14. Disk in Microsoft WORD containing Agency's Proposed New 35 Ill. Adm. Code Part 226 and First Notice Forms

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
STANDARDS AND LIMITATIONS FOR) RI3-14-19
CERTAIN SOURCES OF LEAD: PROPOSED) (Rulemaking-Air)
35 ILL. ADM. CODE 226,)

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CLERK'S OFFICE
NOV 15 2013
STATE OF ILLINOIS
Pollution Control Board

APPEARANCE

The undersigned hereby enters her appearance as an attorney on behalf of the Illinois
Environmental Protection Agency.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: Sally Carter
Sally Carter
Assistant Counsel
Division of Legal Counsel

DATED: November 12, 2013

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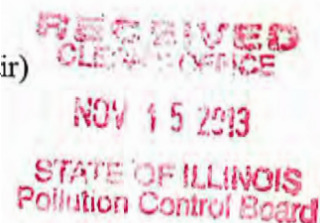
BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:

STANDARDS AND LIMITATIONS FOR
CERTAIN SOURCES OF LEAD: PROPOSED
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(Rulemaking-Air)



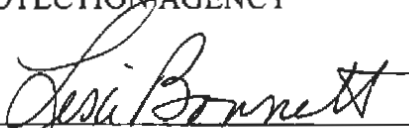
**ILLINOIS ENVIRONMENTAL PROTECTION AGENCY PROPOSAL OF
REGULATIONS**

The Illinois Environmental Protection Agency moves that the Illinois Pollution Control Board adopt the attached regulations.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By:



Lisa Bonnett
Director

DATED: November 12, 2013

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P.O. Box 19276
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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
STANDARDS AND LIMITATIONS FOR:)
CERTAIN SOURCES OF LEAD: PROPOSED)
35 ILL. ADM. CODE 226,)

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CERTIFICATION OF REQUIRED RULE

The Illinois Environmental Protection Agency ("Illinois EPA") certifies in accordance with 35 Ill. Adm. Code 102.202(g) and 102.500, and 415 ILCS 5/28.2(b), that it believes that this proposal for new 35 Ill. Adm. Code 226, Standard and Limitations for Certain Sources of Lead, is a federally required rule of the State of Illinois under the federal Clean Air Act ("CAA"), 42 U.S.C. § 7401 *et seq.* Specifically, the rulemaking is federally required to satisfy Illinois' obligation to submit a State Implementation Plan ("SIP") to address requirements under Sections 172 of the CAA and 40 C.F.R. §51.117 for sources of lead emissions in areas designated as nonattainment with respect to the lead NAAQS. *See*, 42 U.S.C. §§ 7502.

This proposal for new regulations is needed to satisfy Illinois' obligation to submit a SIP for culpable sources of lead emissions in areas designated as nonattainment with respect to the 2008 lead National Ambient Air Quality Standards ("NAAQS"). On November 12, 2008, the United States Environmental Protection Agency ("USEPA") revised the NAAQS for lead by replacing the level from 1.5 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) to $0.15 \mu\text{g}/\text{m}^3$. 73 *Fed. Reg.* 66964-01 (November 12, 2008). In Illinois, two areas have been designated as nonattainment for lead. The first is the Granite City IL designated area, which is part of Madison County, specifically, the area bounded by Granite City Township and Venice Township. The second area is the Chicago IL designated area, which is part of Cook County, specifically, the area bounded

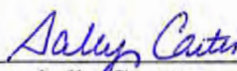
by Damen Avenue on the west, Roosevelt Road on the north, the Dan Ryan Expressway on the east, and the Stevenson Expressway on the south. 40 C.F.R. §81.314.

Under Section 110 of the CAA and related provisions, states are required to submit, for the USEPA's approval, SIPs that provide for the attainment and maintenance of standards established by USEPA through control programs directed to the sources of the pollutants involved. 42 U.S.C. §7410. The CAA also provides for the State to address emissions sources on an area-specific basis through such requirements as reasonably available control measures ("RACM") and reasonably available control technology ("RACT"). *See*, 42 U.S.C. §§7502. For each nonattainment area, the CAA requires the State to demonstrate that it has adopted "all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards." 42 U.S.C. §§ 7502(c)(1). *See also*, *National Ambient Air Quality Standards for Lead, Final Rule*, 73 FR 66964, 67036 (November 12, 2008).

These new regulations are intended to establish lead controls for the culpable sources in the two areas of Illinois currently designated nonattainment for the 2008 lead NAAQS and are necessary in order to satisfy federal requirements.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: 
Sally Carter
Assistant Counsel
Division of Legal Counsel

DATED: November 12, 2013

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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:

STANDARDS AND LIMITATIONS FOR
CERTAIN SOURCES OF LEAD: PROPOSED
35 ILL. ADM. CODE 226,

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14-19
R13-
(Rulemaking – Air)

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NOV 15 2013
STATE OF ILLINOIS
Pollution Control Board

MOTION FOR WAIVER OF COPY REQUIREMENTS

The Proponent, the Illinois Environmental Protection Agency (“Illinois EPA”), by its attorney, and pursuant to 35 Ill. Adm. Code 101.500, 102.110, 102.200, and 102.402, respectfully moves that the Illinois Pollution Control Board (“Board”) waive the requirement that the Illinois EPA submit the original and nine copies of the regulatory proposal including all documents relied upon, and waive the requirement that the Illinois EPA provide copies of certain documents relied upon. In support of its Motion, Illinois EPA states as follows:

1. Section 102.200 of the Board’s procedural rules requires that the original and nine copies of each regulatory proposal be filed with the Clerk. 35 Ill. Adm. Code Section 102.200. Section 27(a) of the Environmental Protection Act also requires that the Illinois EPA provide information supporting a regulatory proposal. 415 ILCS 5/27(a).

2. The Illinois EPA relied upon several documents when drafting the regulatory proposal, and incorporated by reference certain documents as well. The documents relied upon/incorporated by reference are as follows:

- a. 40 CFR 51, Appendix M, Method 204.
- b. Gutow, B., *An Inventory of Iron Foundry Emissions*, Prepared for Air Pollution Control Office, Environmental Protection Agency, (Under Contract CPA 22-60-106), January 1972.
- c. Illinois Environmental Protection Agency. Modeling Data for Part 226, Standards and Limitations for Certain Sources of Lead. Bureau of Air, Air Quality Planning Section, Springfield, IL, 2013.

- d. Illinois Environmental Protection Agency. *Technical Support Document for Control of Lead Emissions from Nonferrous Metal Production Facilities in Lead Nonattainment Areas*, AQPSTR 13-07. Bureau of Air, Air Quality Planning Section, Springfield, IL, October 2013.
- e. TRC Environmental Corporation. *Assessment of Fugitive Lead Emissions from the Electric Furnace Building, H. Kramer & Co., Chicago, Illinois*, June 26, 2012.
- f. TRC Environmental Corporation. *Assessment of Fugitive Lead Emissions from the South Foundry Building, H. Kramer & Co., Chicago, Illinois*, June 2012.
- g. U.S. Environmental Protection Agency. *Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources*, AP-42, Fifth Edition, Pages 12.17-1 – 12.17-4. January 1995.
- h. U.S. Environmental Protection Agency, *Implementation of the 2008 Lead National Ambient Air Quality Standards, Guide to Developing Reasonably Available Control Measures (RACM) for Controlling Lead Emissions*, (EPA-457/R-12-001). March 2012.
- i. *United States of America and State of Illinois v. H. Kramer & Co.*, U.S. Dist. Ct., Northern District, Civil Action No. 13 CV 0771, Consent Decree, December 24, 2012.
- j. Illinois Environmental Protection Act (415 ILCS 5/et seq.)
- k. Clean Air Act (42 U.S.C. 7401 et seq.)
- l. Incorporations by reference:
 1. 75 FR 71033-01, Air Quality Designations for the 2008 Lead (Pb) National Ambient Air Quality Standards (Tuesday, November 22, 2010).
 2. 76 FR 72097-01, Air Quality Designations for the 2008 Lead (Pb) National Ambient Air Quality Standards (Tuesday, November 22, 2011).
 3. 40 CFR 60, Appendix A, Method 29 (2012).
 4. 40 CFR 60, Appendix A, Method 1, 1A (2012).
 5. 40 CFR 60, Appendix A, Method 2, 2A, 2C, and 2D (2012).
 6. 40 CFR 60, Appendix A, Method 3, 3A (2012).
 7. 40 CFR 60, Appendix A, Method 4 (2012).

8. 40 CFR 60, Appendix A, Method 12 (2012).
9. U.S. Environmental Protection Agency. Emission Measurement Center Guideline Document (GD-042). *Preparation and Review of Site-Specific Emission Test Plans*, Revised March 1999.
10. 40 CFR 260.11(c)(3)(v) and 261, Method 1311 (2012).
11. Occupational Safety & Health Administration. OSHA Method 1006. Methods Development Team, Industrial Hygiene Chemistry Division, OSHA Salt Lake Technical Center, Sandy, UT 84070-6406, (801) 233-4900, January 2005.

3. Several of the documents described above--the Code of Federal Regulations, the Illinois Environmental Protection Act, the Clean Air Act, and the Federal Registers--are readily accessible to or are within the possession of the Board. Given the length and ease of accessibility of these documents, the Illinois EPA moves that the Board waive the requirement that the Illinois EPA provide copies of such documents.

4. Item (c) described above, Modeling Data for Part 226, Standards and Limitations for Certain Sources of Lead ("Modeling Data"), consists of the underlying inputs used to perform the modeling and the results of the modeling runs. The results of the Modeling Data, which totals approximately 85 MB of data, are generally summarized in the Illinois EPA's *Technical Support Document for Control of Lead Emissions from Nonferrous Metal Production Facilities in Lead Nonattainment Areas*. However, the Modeling Data is virtually meaningless without the appropriate software to run the data. As such, the Illinois EPA moves the Board to waive the requirement that the Illinois EPA provide copies of such Modeling Data. In the event that the Board receives a request to review the data, the Illinois EPA would promptly make such Modeling Data available to the Board.

5. The remainder of the regulatory proposal consists of over 200 pages. Given the length of the proposal and the resources required to provide nine copies, Illinois EPA requests that the Board waive the normal copy requirements and allow Illinois EPA to file the original and four complete copies of the documents.

WHEREFORE, the Illinois EPA moves that the Board waive the requirement that the Illinois EPA provide copies of the documents listed above as items (a), (c), (j), (k), (l)(1) through (l)(8), and (l)(10) and waive the requirement that the Illinois EPA provide an original and nine copies of the remaining documents in its regulatory proposal, allowing the Illinois EPA to provide the original and four copies.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: *Sally Carter*
Sally Carter
Assistant Counsel
Division of Legal Counsel

DATED: November 12, 2013
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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

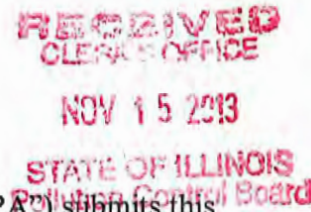
IN THE MATTER OF:)
)
STANDARDS AND LIMITATIONS FOR) R13-
CERTAIN SOURCES OF LEAD: PROPOSED) (Rulemaking – Air)
35 ILL. ADM. CODE 226,)

STATEMENT OF REASONS

I. INTRODUCTION

The Illinois Environmental Protection Agency ("Illinois EPA") submits this Statement of Reasons to the Illinois Pollution Control Board ("Board") pursuant to Sections 10, 27, 28, and 28.5 of the Illinois Environmental Protection Act ("Act"), 415 ILCS 5/10, 27, 28, and 28.5, and 35 Ill. Adm. Code 102.302 in support of the proposed new 35 Ill. Adm. Code Part 226, Standards and Limitations for Certain Sources of Lead. This regulation is proposed to control lead emissions from sources in two areas of Illinois that currently do not meet the lead National Ambient Air Quality Standards ("NAAQS").

This proposed rulemaking is intended to meet certain obligations of the State of Illinois under the federal Clean Air Act ("CAA"), 42 U.S.C. § 7401 *et seq.* Specifically, the rulemaking is intended to satisfy Illinois' obligation to submit a State Implementation Plan ("SIP") to address requirements under Section 172 of the CAA and 40 C.F.R. §51.117 for sources of lead emissions in areas designated as nonattainment with respect to the lead NAAQS. *See*, 42 U.S.C. §§ 7502. Illinois has formulated a thorough regulatory approach to comply with State requirements under the CAA and, as such, is proposing reasonable and cost-effective lead controls on nonferrous metal production facilities located in those areas in Illinois designated nonattainment for the 2008 lead NAAQS.



Under Section 110 of the CAA and related provisions, states are required to submit, for the United States Environmental Protection Agency's ("USEPA") approval, SIPs that provide for the attainment and maintenance of standards established by USEPA through control programs directed to the sources of the pollutants involved. 42 U.S.C. §7410. The CAA also provides for the State to address emissions sources on an area-specific basis through such requirements as reasonably available control measures ("RACM") and reasonably available control technology ("RACT"). *See*, 42 U.S.C. §§7502. For each nonattainment area, the CAA requires the State to demonstrate that it has adopted "all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards." 42 U.S.C. §§ 7502(c)(1). *See also*, *National Ambient Air Quality Standards for Lead, Final Rule*, 73 FR 66964, 67036 (November 12, 2008).

Illinois is proposing new regulations that establish lead controls for nonferrous metal production facilities in areas in Illinois designated nonattainment for the 2008 lead NAAQS, and which are necessary in order to obtain USEPA's approval of Illinois' SIP submittal. Included in this proposal are proposed new regulations, 35 Ill. Adm. Code 226, Standards and Limitations for Certain Sources of Lead.

II. STATEMENT OF FACTS

The CAA establishes a comprehensive program for controlling and improving the nation's air quality by way of state and federal regulations. USEPA is charged with identifying air pollutants that endanger the public health and welfare and with

formulating the NAAQS that specify the maximum permissible concentrations of those pollutants in the ambient air under Section 108 and 109 of the CAA. 42 U.S.C. §§ 7408-7409.

A. Lead

Lead is a naturally occurring trace element found in the environment. *See, Technical Support Document for Control of Lead Emissions from Nonferrous Metal Production Facilities in Lead Nonattainment Areas*, AQPSTR 13-07, Illinois Environmental Protection Agency, October 2013 (“TSD”). It is also a pollutant that is released to the environment by human activities such as the use of fossil fuels and other industrial processes that employ lead. *Id.* Lead is a criteria pollutant for which USEPA has established a NAAQS, it is a hazardous air pollutant (“HAP”) and has adverse health impacts. *Id.*

Emissions of lead occur predominantly in particulate form, with the particles occurring in various sizes. 73 *Fed. Reg.* 66964-01, 66971. (November 12, 2008). Generally speaking, larger particles tend to deposit closer to emission points than the smaller particles that tend to travel farther before depositing. *Id.* “Airborne concentrations of [lead] at sites near sources are much higher, and the representation of larger particles is greater, than at sites not known to be directly influenced by sources.” *Id.*

Exposure to lead emissions can occur by means of direct inhalation or indirectly through the ingestion of contaminated food, water, or other materials including dust or soil. *Id.* In its 2008 revision to the lead NAAQS, USEPA focused on the public’s exposure to ambient emissions. *Id.* at 66975. Once ingested, lead can cause an array of health effects, particularly for at-risk populations such as children. *TSD. See also*, 73

Fed. Reg. 66964-01, 66983. (November 12, 2008). Of greatest concern to public health are the ensuing neurotoxic effects in children and cardiovascular effects in adults. 73 *Fed. Reg.* 66964-01, 66975 (November 12, 2008). Such neurotoxic effects to children can include damage to the brain and nervous system, behavior and learning problems, and lower intelligence test results. 73 *Fed. Reg.* 66964-01, 66976-66979 (November 12, 2008). *See also, Implementation of the 2008 Lead National Ambient Air Quality Standards Guide to Developing Reasonably Available Control Measures (RACM) for Controlling Lead Emissions*, EPA-457/R-12-001, March 2012; *See also, TSD*. Additional significant health effects for children include hematological and immune; significant health effects for adults also include hematological and renal. 73 *Fed. Reg.* 66964-01, 66975 (November 12, 2008).

On November 12, 2008, USEPA revised the NAAQS for lead by reducing the level from 1.5 micrograms per cubic meter¹ ($\mu\text{g}/\text{m}^3$) to 0.15 $\mu\text{g}/\text{m}^3$. 73 *Fed. Reg.* 66964-01 (November 12, 2008). USEPA opted to maintain the current indicator of lead in total suspended particulates (Pb-TSP) and to revise the averaging time to a “not-to-be-exceeded” form based upon a three-month rolling average evaluated over a three-year period. *Id.* In Illinois, there are two areas designated as nonattainment for lead. The first is the Granite City, Illinois, designated area, which is part of Madison County, specifically, the area bounded by Granite City Township and Venice Township. The second area is the Chicago, Illinois, designated area, which is part of Cook County, specifically, the area bounded by Damen Avenue on the west, Roosevelt Road on the

¹ On October 5, 1978, USEPA promulgated primary and secondary NAAQS for lead; both levels were originally set at 1.5 $\mu\text{g}/\text{m}^3$ measured as lead in total suspended particulate matter (Pb-TSP), not to be exceeded by the maximum arithmetic mean concentration averaged over a calendar quarter. 43 *Fed. Reg.* 46246.

north, the Dan Ryan Expressway on the east, and the Stevenson Expressway on the south.
40 C.F.R. §81.314.

B. Clean Air Act Requirements

States are primarily responsible for ensuring attainment and maintenance of NAAQS once USEPA has established them. Under Section 110 of the CAA and related provisions, states are required to submit, for USEPA approval, SIPs that provide for the attainment and maintenance of standards established by USEPA through control programs directed to the sources of the pollutants involved. 42 U.S.C. §7410. Additional requirements include Section 172 of Subpart 1, Nonattainment Areas in General, and Section 191 of Subpart 5, Additional Provisions for Areas Designated Nonattainment for Sulfur Oxides.

III. SECTION 28.5 OF THE ACT

This regulatory proposal is properly submitted to the Board under Section 28.5 of the Act as a "fast-track" rulemaking proceeding. Section 28.5 of the Act "shall apply solely to the adoption of rules proposed by the Agency and required to be adopted by the State under the Clean Air Act as amended by the Clean Air Act Amendments (CAAA)." 415 ILCS 5/28.5(a). Other requirements for a proposal satisfying the criteria for a fast-track rulemaking are as follows:

For purposes of this Section, a 'fast-track' rulemaking proceeding is a proceeding to promulgate a rule that the CAAA requires to be adopted. For purposes of this Section, 'requires to be adopted' refers only to those regulations or parts of regulations for which the United States Environmental Protection Agency is empowered to impose sanctions against the State for failure to adopt such rules.

415 ILCS 5/28.5(c). Furthermore, Section 28.5(d) provides, "When the CAAA requires rules other than identical in substance rules to be adopted, upon request by the Agency,

the Board shall adopt rules under fast-track rulemaking requirements." 415 ILCS 5/28.5(d).

In short, in order for the Board to accept proposed rules as a fast-track rulemaking, the proposal must meet three prerequisites: (1) It must be for rules that are required to be adopted by the State under the CAA; (2) It must be for rules for which the USEPA is empowered to impose sanctions against the State for failure to adopt such rules; and (3) It must be for rules other than "identical in substance" rules.

A. CAA Requirements

As discussed *supra*, states are primarily responsible for ensuring attainment and maintenance of NAAQS once USEPA has established them. Under Section 110 of the CAA and related provisions, states are to submit, for USEPA approval, SIPs that provide for attainment and maintenance of such standards through control programs directed to the sources of the pollutants involved. 42 U.S.C. § 7410. *See also*, 73 Fed. Reg. 66964-01, 67030-67034. Additional requirements include Section 172 and 191 of the CAA. *See also*, 73 Fed. Reg. 66964-01, 67035. Accordingly, Illinois EPA's regulatory proposal is clearly required to be adopted by the CAA.

B. USEPA Sanctions

For the Granite City NAA, Illinois was required to submit its SIP to the USEPA within eighteen months of the effective date of the nonattainment designation, i.e., by June 30, 2012. 42 U.S.C. §7514(a). *See also*, 75 Fed. Reg. 71033-01. For the Chicago NAA, Illinois was required to submit its SIP to USEPA by no later than June 30, 2013. 76 Fed. Reg. 72097-01. USEPA has the authority to impose sanctions under the principle of "cooperative federalism" program for an untimely SIP submittal. *Hodel v. Virginia*

Surface Mining and Reclamation Association, Inc., 452 U.S. 264, 289, 101 S.Ct. 2352, 2366-2367 (1981); *Virginia v. Browner*, 80 F.3d 869, 883 (4th Cir. 1996). As part of a program of cooperative federalism in which States are allowed to enact and administer programs that meet minimum federal requirements, there are certain “inducements” that are available to the Federal government. The sanctions provided for in the CAA are examples of such inducements. *Virginia*, 80 F.3d at 881.

Section 179 of the CAA details specific sanctions and consequences for a state’s failure to submit an approvable SIP for a designated nonattainment area. Pursuant to Section 179(a) of the CAA, if USEPA “finds that a State has failed, for an area designated nonattainment under section 107(d) to submit a plan . . . one of the sanctions referred to in subsection (b) shall apply.” 42 U.S.C. § 7509(a). Section 179(b) of the CAA sets forth two sanctions available to USEPA if it were to find that Illinois failed to submit an approvable SIP revision. These include the loss of highway funds and/or an increase in the emissions offset ratio for New Source Review. 42 U.S.C. § 7509(b).

An additional sanction that may be imposed upon Illinois in the present situation is a reduction in the grant that Illinois receives under Section 105 of the CAA to administer programs required by the CAA. 42 U.S.C. § 7405. *See also*, 42 U.S.C. § 7509(a) (providing that in addition to any other sanction authorized by Section 179 of the CAA, USEPA “may withhold all or part of the grants for support of air pollution planning and control programs that the Administrator may award under section 105.”). Again, the use by the Federal government of the “power of the purse” is a recognized sanction. *New York v. United States*, 505 U.S. 144, 167, 112 S.Ct. 2408, 2423 (1992); *Virginia*, 80 F.3d at 873-874 and 881-882.

Further, USEPA has the authority under the following to prescribe a Federal plan:

(c)(1) The Administrator shall promulgate a Federal implementation plan at any time within 2 years after the Administrator--

(A) finds that a State has failed to make a required submission...

42 U.S.C. § 7410(c)(1)(A). Anytime after June 30, 2012, USEPA has the authority to prescribe a plan for Illinois for the Granite City NAA and similarly, anytime after June 30, 2013, USEPA has the authority to prescribe a plan for the Chicago NAA. Just as the ability to reduce grant funding equates to a sanction, so too would the imposition of a Federal plan be a sanction. *Virginia*, 80 F.3d at 874-875 and 882-883. The State's authority to implement the most appropriate control measures would be constrained and USEPA would have the authority to reduce the funding that Illinois EPA receives to administer various CAA programs.²

Consistent with the previously cited precedence, the Board has previously recognized the sanctions provided by the CAA and for this reason has adopted regulations under Section 28.5 of the Act. Numerous regulations have been adopted by the Board based upon the authority of the CAA as warranting the utilization of Section 28.5 of the Act.³

² In drafting the proposed regulations, Illinois EPA has been communicating with USEPA in order to ensure that any comments submitted by USEPA on the proposed regulations and accompanying modeling have been addressed prior to this submittal to the Board. USEPA has yet to make a finding that Illinois, among other states, has failed to make a RACT submittal required under Part D of Title I of the CAA for its two lead nonattainment areas. If such a finding is made, it would begin the 18-month emission offset sanctions clock and the 24-month highway funding sanctions clock under Section 179(a) and (b) of the CAA and the 24-month clock for the promulgation by USEPA of a Federal Implementation Plan under Section 110(c) of the CAA. 42 U.S.C. §§ 7509(a) and (b) and 7410(c).

³ See, In the Matter of: Amendments to the New Source Review Rules 35 Ill. Adm. Code 203, R92-21, April 30, 1993; In the Matter of: Omnibus Cleanup of the Volatile Organic Material RACT Rules Applicable to Ozone Nonattainment Areas: Amendments to 35 Ill. Adm. Code Parts 203, 211, 218 and 219, R93-9, September 27, 1993; In the Matter of: Reasonable Available Control Technology for Major Sources Emitting Volatile Organic Materials in the Chicago Ozone Nonattainment Area: 25 Tons (Amendments to 35 Ill. Adm. Code Parts 211 and 218), R93-14, January 24, 1994; In the Matter of:

C. Not Identical In Substance

Illinois EPA's regulatory proposal is not an identical in substance proposal. As stated *supra*, under Section 110 of the CAA and related provisions, states are to submit, for USEPA approval, SIPs that provide for the attainment and maintenance of such standards through control programs directed to the source of the pollutants involved. 42 U.S.C. § 7410. Consistent therewith, in this regulatory proposal, the Illinois EPA appropriately exercised its decision-making authority in deciding how to meet its obligations under Section 172(c) and 191 of the CAA. For these reasons, this rulemaking

Categories of Insignificant Activities or Emission Levels at a CAAPP Source (Amendments to 35 Ill. Adm. Code 201 and 211), R94-14, October 17, 1994; In the Matter of: 15% ROP Plan Control Measures for VOM Emissions-Part II Marine Vessel Loading: Amendments 35 Ill. Adm. Code Parts 211, 218 and 219, R94-15, October 25, 1994; In the Matter of: 15% ROP Plan Control Measures for VOM Emissions - Part III: Air Oxidation and Organic Emissions from Storage and Loading Operations: Amendments to 35 Ill. Adm. Code 211, 218 and 219, R94-16, November 15, 1994; In the Matter of: 15% ROP Plan Control Measures for VOM Emissions-Part IV: Tightening Surface Coating Standards; Surface Coating of Automotive\ Transportation and Business Machine Plastic Parts; Wood Furniture Coating; Reactor Processes and Distillation Operation Processes in SOCM; and Bakery Ovens (Amendments to 35 Ill. Adm. Code Parts 211, 218 and 219), R94-21, May 9, 1995; In the Matter of: 15% ROP Plan Control Measures for VOM Emissions - Part V: Control of Volatile Organic Compound Emissions from Lithographic Printing: Amendments to 35 Ill. Adm. Code Parts 211, 218, and 219, R94-31, May 9, 1995; In the Matter of: 15% ROP Plan Control Measures for VOM Emissions - Part VI: Motor Vehicle Refinishing: Amendments to 35 Ill. Adm. Code 211, 218 and 219, R94-32, May 9, 1995; In the Matter of: 15% ROP Plan Control Measures for VOM Emissions - Part VII: Batch Operations: Amendments to 35 Ill. Adm. Code Parts 211, 218 and 219, R94-33, May 22, 1995; In the Matter of: Clean Fuel Fleet Program: Proposed 35 Ill. Adm. Code 241, R95-12, September 11, 1995; In the Matter of: 15% ROP Plan: Clean-Up Part I – Amendments to 35 Ill. Adm. Code 219.585(A) and 219, Appendix E, R96-2, February 15, 1996; In the Matter of: Visible and Particulate Matter Emissions-Conditional Approval and Clean Up Amendments to 35 Ill. Adm. Code Parts 211 and 212, R96-5, May 22, 1996; In the Matter of: 15% ROP Plan: Clean-Up Part II: Amendments to 35 Ill. Adm. Code Parts 218 and 219, R96-13, October 17, 1996; In the Matter of: 9% ROP Plan Control Measures for VOM Emissions-Tightening Cold Cleaning Requirements: Amendments to 35 Ill. Adm. Code 211, 218 and 219, Subpart E, R97-24, June 9, 1997; In the Matter of: Major Stationary Sources Construction and Modification (New Source Review Rules): Amendments to 35 Ill. Adm. Code 203, R98-10, March 10, 1998; In the Matter of: Enhanced Vehicle Inspection and Maintenance (I/M) Regulations: Amendments to 35 Ill. Adm. Code 240, R98-24, July 13, 1998; In the Matter of: Proposed New 35 Ill. Adm. Code 217, Subpart W, The NO_x Trading Program for Electrical Generating Units, and Amendments to 35 Ill. Adm. Code 211 and 217, R01-9, December 26, 2000; In the Matter of: Proposed New 35 Ill. Adm. Code 217, Subpart T, Cement Kilns, and Amendments to 35 Ill. Adm. Code 211 and 217, R01-11, March 15, 2001; In the Matter of: Proposed Amendments to 35 Ill. Adm. Code 217, Subpart V, Electric Power Generation, R01-16, April 17, 2001; and In the Matter of: Proposed New 35 Ill. Adm. Code 217, Subpart U, NO_x Control and Trading Program for Specified NO_x Generating Units, Subpart X, Voluntary NO_x Emissions Reduction Program, and Amendments to 35 Ill. Adm. Code 211, R01-17, April 17, 2001.

properly appears before the Board under the fast-track provisions of Section 28.5 of the Act.

III. PURPOSE AND EFFECT OF THE PROPOSAL

As discussed *supra*, this regulatory proposal has been prepared to satisfy Illinois' obligation to submit a SIP to address the requirements under Section 172 and 191 of the CAA for areas designated as nonattainment with respect to the lead NAAQS.

USEPA designated two areas in Illinois as nonattainment for lead. Such designations triggered requirements under the CAA for adopting regulations that reduce emissions sufficiently to demonstrate attainment of the standard. Under Section 172(c)(1), states with nonattainment areas are required to submit, in part, SIPs that provide for the adoption of RACM for stationary sources in all nonattainment areas as expeditiously as possible. 42 U.S.C. § 7502(c)(1). Section 172(c)(1) of the CAA provides, in relevant part, as follows:

(c) Nonattainment plan provisions

The plan provisions (including plan items) required to be submitted under this part shall comply with each of the following:

(1) In general

Such plan provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards.

42 U.S.C. § 7502(c)(1). A subset of RACM is RACT, which is defined as the lowest emission limitation that a particular source can meet by applying a control technique that is reasonably available considering technological and economic feasibility. *See, 44 Fed.*

Reg. 53762 (September 17, 1979). In its 2008 revisions to the lead NAAQS, USEPA stated as well that “[l]ead nonattainment area SIPs must contain RACM (including RACT) that address sources of ambient lead concentrations.” *See*, 73 *Fed. Reg.* 66964, 67035. (November 12, 2008). As such, Section 172 of the CAA establishes the requirement for Illinois to submit RACT regulations for each lead nonattainment area. *See also*, 73 *Fed. Reg.* 66964, 67035-67036 (November 12, 2008).⁴

To satisfy Illinois’ regulatory obligations, this proposal aims to achieve lead reductions in Illinois from nonferrous metal production facilities while providing a degree of flexibility for the affected sources. The regulatory proposal would require existing lead emission units located in nonattainment areas in Illinois to comply with the emissions limits set by the proposed regulation beginning January 1, 2015. For purposes of applicability of the proposed regulation, a nonferrous metal production facility would be any source that is alloying, refining, or casting nonferrous metal or manufacturing nonferrous metal products and where the source includes lead in their alloys or products by design.

The proposed regulation would require all lead kettles and furnaces to be equipped with a capture system and vented to an accompanying control device. Depending on the type of lead kettle or furnace being regulated, the regulatory proposal would set forth an accompanying lead emission limit for the exhaust from the associated control device. In addition, the proposed regulation would require the operation of alloying and refining kettles and reverberatory or rotary furnaces within a total enclosure.

⁴ “We anticipate that states may decide upon RACT and RACM controls that differ from state to state, based on the state’s determination of the most effective strategies given the relevant mixture of sources and potential controls in the relevant nonattainment areas, and differences in difficulty of attaining expeditiously.” *See*, 73 *Fed. Reg.* 66964, 67036 (November 12, 2008).

Any gas stream exiting the total enclosure through a control device would be limited by a lead emission limit as well. The proposed regulation would include periodic monitoring requirements for pollution control devices, requiring the owner or operator to measure the pressure drop across each control device and requiring the operation of a leak detection system in the event a filter system is installed. Affected sources would also be required to develop and maintain a Control Device Monitoring Plan (CDMP).

In addition to the emission limit for the gas stream exiting any total enclosure, the proposed regulations would require the operation and maintenance of any total enclosure with an inward flow of air through all natural draft openings. Flexibility is built in as the proposed regulations would allow an owner or operator to either elect to measure the facial velocity of air flowing through all natural openings during operation of a lead emission unit or to install, operate, and maintain instrumentation to monitor the pressure differential between the interior and exterior of the total enclosure. Flexibility is further preserved by the Continuous Parametric Monitoring Plan (CPMP) that would be required to be developed and maintained by the proposed regulations. The CPMP would allow the owner or operator to select between three alternative means to demonstrate compliance with the air flow requirements of the total enclosure. An owner or operator would be allowed to elect to measure the facial velocity of air flowing through all natural openings in the total enclosure during operation of lead emission units or to install, operate, and maintain instrumentation to monitor the pressure differential between the interior and exterior of the total enclosure. If an owner or operator elects to measure facial velocity,

this may be completed by means of testing or by means of the installation, maintenance, and operation of a flow monitor.⁵

The regulatory proposal would further require the owner or operator to operate at all times according to a lead fugitive dust operating program detailing the measures that are implemented to minimize lead fugitive dust emissions. In addition, provisions detail inspection, emissions testing, and recordkeeping and reporting requirements in the proposed regulation. A section-by-section summary of the Illinois EPA's regulatory proposal is set forth *infra*.

IV. GEOGRAPHIC REGIONS AND SOURCES AFFECTED

The geographic regions subject to the proposed regulations are the two areas designated as nonattainment for the 2008 lead standard: 1) the Chicago, Cook County, Illinois designated area, which includes part of Cook County, specifically, the area bounded by Damen Avenue on the west, Roosevelt Road on the north, the Dan Ryan Expressway on the east, and the Stevenson Expressway on the south and 2) the Granite City, Madison County, Illinois designated area, which includes part of Madison County, specifically, the area bound by the Granite City Township and the Venice Township. 40 CFR § 81.314.

The proposed amendments are generally expected to affect both new and existing sources that meet the definition of a nonferrous metal production facility and that are located in the Chicago or Granite City NAAs. The proposed regulations are expected to affect H. Kramer and Co. Brass and Bronze Foundry (Kramer) in the Chicago NAA and Mayco Industries LLC (Mayco) in the Granite City NAA.

⁵ The proposed regulations require the installation, operation, and maintenance of a digital differential pressure monitoring system to demonstrate compliance.

V. TECHNICAL FEASIBILITY AND ECONOMIC ANALYSIS

The technology for controlling lead emissions from nonferrous metal production facilities is readily available. *See, TSD*. The proposed regulation is expected to reduce lead emissions by 50% or 100 pounds per year beginning in 2015 in the Chicago NAA and to reduce lead emissions by 53.7% or 485 pounds per year beginning in 2015 in the Granite City NAA. The Illinois EPA has concluded that the affected sources can meet the requirements of the regulatory proposal through a number of control techniques such that compliance is technically feasible. *Id.*

With regard to the numerical lead emission limits in the proposed regulation, these limits are achievable with commercially available particulate control equipment. Fugitive emission reduction measures in the proposed regulation including total enclosures under negative pressure, other capture systems, and housekeeping measures are common in similar industrial settings nationwide and are feasible and appropriate for the affected sources. Furthermore, in the process of drafting the proposed regulation, Illinois EPA has engaged in extensive communication with the affected sources regarding the technical aspects of their emission units and pollution control equipment. The information conveyed in these discussions was incorporated into Illinois EPA's analyses of the measures necessary to demonstrate the anticipated attainment of the NAAQS in both lead nonattainment areas, and are reflected in the proposed regulation. Both sources have agreed that these requirements are technically feasible.

Concerning the economic reasonableness of the proposed regulation, again, the Illinois EPA has made efforts to remain in communication with both affected sources during the process of drafting the proposed regulation. These communications have not

only resulted in cooperation between the Illinois EPA and the affected sources but a greater understanding of these sources' operations by the Illinois EPA, and in a proposed regulation that the Illinois EPA anticipates will result in NAAQS attainment in both nonattainment areas in an economically reasonable manner. Further supporting this conclusion, both sources have agreed that the requirements set forth in the proposed regulation are reasonable for the control of lead. H. Kramer and Mayco have each begun making the requisite changes to their respective operations concurrently with this rulemaking in order to comply with the proposed requirements by the effective date in the proposed regulation. These acts further confirm the Illinois EPA's conclusion that the requirements in the proposed regulations may be completed in an economically reasonable manner.

There are a number of control options available to achieve the control levels set forth in this regulatory proposal. The Illinois EPA's analysis, explained in detail in the *Technical Support Document* and supporting documentation, demonstrates the technical feasibility and economic reasonableness of this proposed regulatory proposal.

VI. COMMUNICATION WITH INTERESTED PARTIES

The Illinois EPA engaged in extensive outreach on this proposal. In March 2012, the Illinois EPA commenced discussions and/or meetings with Mayco Industries. Similar communications commenced between the Illinois EPA and H. Kramer in November 2012. Illinois EPA distributed working drafts of the proposed regulation to Mayco Industries on August 7, 2012, December 10, 2012, March 22, 2013, May 6, 2013, and October 21, 2013. Working drafts of the proposed regulation were provided, as well, to

H. Kramer on December 10, 2012, March 14, 2013, March 22, 2013, May 14, 2013, July 2, 2013, and October 21, 2013.

Illinois EPA has received comments on each of these drafts, and this proposal incorporates many of the concerns and suggestions put forth in these comments from Mayco Industries and H. Kramer. Such comments can generally be categorized into the following areas: plant operations including the particular configuration of emission units and control devices, the approach to modeling, applicability, technology and control, monitoring compliance, and testing.

In addition, the Illinois EPA has participated in public outreach to the communities impacted by the proposed regulation. On June 4, 2013, the Illinois EPA gave a presentation on the proposed regulation during the quarterly Illinois Environmental Justice Advisory Group meeting. During this presentation, the Illinois EPA offered a working draft of the proposed regulation to any interested parties.

To further afford an opportunity for public review and comment on the proposed regulation, the Illinois EPA published notice of the proposed regulation and upcoming informational meetings in the Sun Times – City South on July 2, 2013 and in the Granite City Press Record on July 3, 2013. Meetings were held in the Chicago NAA on July 9, 2013 and in the Granite City NAA on July 11, 2013 to discuss the draft regulation with the public that included interested members of the community and activist organizations. To facilitate such public review and comment, the Illinois EPA posted a draft of the proposed regulation prior to these informational meetings in Chicago and Granite City that remains available on the Illinois EPA's website. The comment period closed on July 25, 2013. The Illinois EPA received one written comment from the public generally

supporting the monitoring efforts of the Illinois EPA. Oral comments received at the meetings were similarly supportive, with positive remarks made by members of the public regarding the Illinois EPA's efforts to bring the areas into attainment. While one anonymous commenter suggested more frequent testing and reporting requirements, specific technical or environmental reasons to support such a suggestion were not tendered.

Finally, the Illinois EPA has been communicating with USEPA in order to ensure that any comments by USEPA on the proposed regulations and accompanying modeling have been addressed prior to the submittal of the proposed new 35 Ill. Adm. Code Part 226 to the Board. Said USEPA comments generally pertained to regulatory applicability and technology and control. Any necessary changes in response to USEPA comments have already been incorporated into the proposal being submitted to the Board.

In conclusion, these regulations are being proposed after interested parties have had an opportunity to review the proposal and discuss any issues with the Illinois EPA.

VII. SYNOPSIS OF TESTIMONY

The Illinois EPA plans to call Rory Davis, Environmental Protection Engineer, Air Quality Planning Section, Bureau of Air, Illinois EPA as a witness at hearing. Written testimony will be submitted prior to hearing in accordance with the Board's procedural rules and with Board orders.

In addition to Mr. Davis, David Bloomberg, Manager, Air Quality Planning Section, Bureau of Air, Illinois EPA, and Jacquelyn Sims, Regulatory Unit Manager, Air Quality Planning Section, Bureau of Air, Illinois EPA, will be available to answer questions regarding the proposed amendments.

VIII. THE ILLINOIS EPA'S PROPOSAL

The following is a Section-by-Section summary of the Illinois EPA's proposal.

35 Ill. Adm. Code 226

Section 226.100 **Severability**

This Section states that finding a Section, subsection or clause of Part 226 invalid does not affect the validity of this Part as a whole or any Section, subsection, or clause not found invalid.

Section 226. 105 **Scope and Organization**

This Section identifies the scope of Part 226 as standards and limitations for emissions of lead from stationary sources. This Section also provides that regardless of the requirements of Part 226, the air quality standards in 35 Ill. Adm. Code 243 may not be violated.

Section 226.110 **Abbreviations and Acronyms**

This Section sets forth the abbreviations and acronyms used in Part 226.

Section 226.115 **Definitions**

This Section provides definitions for terms used in Part 226 and incorporates definitions found in 35 Ill. Adm. Code 211. The terms specifically defined in this Section include many terms that are unique to Part 226.

Section 226. 120 **Incorporations by Reference**

This Section sets forth the documents that are incorporated by reference in Part 226. Subsections (a) and (b) incorporate by reference 75 FR 71033-01, Air Quality Designations for the 2008 Lead (Pb) National Ambient Air Quality Standards (Monday,

November 22, 2010) and 76 FR 72097-01, Air Quality Designations for the 2008 Lead (Pb) National Ambient Air Quality Standards (Tuesday, November 22, 2011).

Subsections (c) through (h) incorporate by reference a number of standard test methods set forth in Appendix A of Part 60 of Title 40, that are to be utilized under Part 226. Specifically, Methods 1, 1A, 2, 2A, 2C, and 2D, 3, 3A, 4, 12 and 29 are being incorporated by reference in this Part.

Subsection (i) incorporates by reference USEPA's Emission Measurement Center Guideline Document, (GD-042), Preparation and Review of Site-Specific Emission Test Plans, Revised March 1999, that details those measure that must be set forth in testing protocols to be submitted to the Illinois EPA. Subsection (j) incorporates Method 1311 by means of 40 CFR 260.11(c)(3)(v) and 40 CFR Part 261. This measurement method is to be utilized to ascertain the lead content in lead-containing material and other similarly defined terms in Section 225.115. Subsection (k) incorporates by reference Method 1006 from the Occupational Safety & Health Administration ("OSHA") that may be utilized as an alternative to emissions testing in one instance.

Section 226.125 **Applicability**

This Section addresses the applicability of proposed Part 226. Subsection (a) provides that Part 226 applies to all nonferrous metal production facilities located in part of Madison County, specifically, the area bounded by Granite City Township and Venice Township designated nonattainment for the 2008 lead NAAQS. Subsection (b) provides that Part 226 applies to all nonferrous metal production facilities located in part of Cook County, specifically, the area bounded by Damen Avenue on the west, Roosevelt Road

on the north, the Dan Ryan Expressway on the east and the Stevenson Expressway on the south designated nonattainment for the 2008 lead NAAQS.

Section 226.130 **Compliance Date**

Subsection (a) provides that compliance with the requirements of Part 226 by an owner or operator of an existing lead emission unit is required by no later than January 1, 2015. Subsection (b) provides that compliance with the requirements of Part 226 by an owner or operator of a new lead emission unit is required by the date on which the unit initially begins operation.

Section 226.140 **Lead Emission Standards**

This Section sets forth the emission standards applicable to lead emission units subject to Part 226. Subsection (a) provides that for all alloying and refining kettles, each lead emission unit must be equipped with a capture system vented to a control device; emissions from the control device must not exceed 0.0010 gr/dscf. Subsection (a) further provides that all alloying and refining kettles must be operated in a total enclosure wherein the gas stream is ducted to control device limiting emissions to 0.00010 gr/dscf.

Subsection (b) provides that reverberatory furnaces or rotary furnaces must be equipped with a capture system vented to a control device limiting emissions to 0.00010 gr/dscf. In addition, these furnaces must all be operated in a total enclosure that vents the gas stream to a control device limiting emissions to 0.00010 gr/dscf.

Subsection (c) provides that, notwithstanding the total enclosure requirements of subsection (a) and (b), lead emissions leaving an uncontrolled stack during quenching or mold cooling operations must not exceed 0.00010 gr/dscf. In addition, quenching operations are limited to no more than 6 hours per associated unit in a 24 hour period.

Subsection (d) provides that induction furnaces must be equipped with a capture system vented to a control device limiting emissions to no more than 0.000010 gr/dscf. Subsection (e) provides that all other furnaces, lead kettles, or any other operation subject to Part 226 must be equipped with a capture system vented to a control device limiting emissions to 0.00010 gr/dscf. Subsection (f) requires all sources subject to the requirements of Part 226 be operated in accordance with conditions set forth in a state-issued operating permit or construction permit.

Section 226.150 **Operational Monitoring for Control Device**

This Section specifies the monitoring requirements for control devices.

Subsection (a) requires the owner or operator of a lead emission unit subject to Part 226 to install, maintain, and operate parametric monitoring equipment that consists of a pressure differential system to measure the pressure drop across each control device required by Section 226.140. This subsection also details how data from this equipment must be recorded.

Subsection (b) provides that an owner or operator employing a baghouse or other filter system to control units subject to the total enclosure requirements of Section 226.155 must install, maintain, and operate a leak detection system at the outlet of the baghouse or other filter system.

Subsection (c) requires the development and maintenance of a Control Device Monitoring Plan (CDMP), approved by the Illinois EPA. Subsection (d) sets forth the particular measures that must be included in the CDMP and also requires the operation and maintenance of each pressure differential system and each leak detection system according to the CDMP at all times. In particular, the CDMP is required to detail

procedures to investigate and determine the cause of changes in pressure that could indicate a leak or other problem and, if applicable, every alarm from the leak detection system. Details of the means to determine appropriate corrective actions and preventative measures to address such pressure changes and to avoid future alarms must be included in the CDMP as well.

Section 226.155 **Total Enclosure**

This Section sets forth the requirements for total enclosure. Subsection (a) provides that an owner or operator of a lead emission unit subject to Part 226 must install, maintain, and operate one or more total enclosures while the lead emission unit applicable to the operation listed in this subsection in the total enclosure is operating or housekeeping activities are being performed. Subsection (b) provides that the gas stream collected by each total enclosure must be ducted to a control device that meets the applicable lead emission standard in Section 226.140.

Subsection (c) provides that the total enclosure must be maintained and operated with an inward flow of air through all natural draft openings while any lead emission unit applicable to the operations listed in subsection (a) in the total enclosure is operating. This subsection goes onto require that the average facial velocity of air flowing into the enclosure through all natural draft openings during operation of the aforementioned lead emission units in any one hour period must be at least 200 feet per minute (fpm). Alternatively, an average negative pressure value of 0.007 inches of water must be maintained in the enclosure over any one hour period.

Subsection (d) requires that the total enclosure must be maintained at any opening while lead emission units in the total enclosure are operating except as required for

temporary access to conduct manufacturing operations. Subsection (e) provides that the total enclosure is to be free of deterioration that could cause dust to be emitted to the atmosphere except that the total area of all natural draft openings must not exceed five percent of the surface area of the total enclosure's walls, floor, and ceiling.

Section 226.160 **Operational Measurement for Total Enclosure**

This Section specifies the monitoring requirements for each total enclosure.

Subsection (a) requires the owner or operator of a lead emission unit subject to the total enclosure requirement of Section 226.155 to measure the total area of all natural draft openings and the total surface area of the total enclosure.

Subsection (b) provides the equation to be employed to determine the facial velocity of air flowing through all natural draft openings in the total enclosure while the lead emission unit applicable to the operation listed in Section 226.155(a) is operating. This subsection goes onto provide the required methodology to ascertain the inputs for the terms of the equation, i.e., to be determined by means of testing or monitoring data.

Subsection (c) provides that as an alternative to compliance with the requirements of subsection (b), the owner or operator may comply with the standards for total enclosure by installing, operating, and maintaining instrumentation to monitor the pressure differential between the interior and exterior of the enclosure. Subsection (c) further provides requirements for the location and design of the required digital differential pressure monitoring system.

Subsection (d) requires the development and maintenance of a Continuous Parametric Monitoring Plan (CPMP), approved by the Illinois EPA, for each total enclosure required by Section 226.155. Subsection (d) generally sets forth the measures

that must be included in the CPMP and also requires the monitoring of each total enclosure to be in accordance with the CPMP at all times. Subsection (d)(1) sets forth the particular measures that must be included in the CPMP if an owner or operator is electing to comply with the facial velocity requirement of Section 226.155(c) by means of the total enclosure measurement method in subsection (b)(1), i.e., testing. Subsection (d)(2) sets forth the particular measures that must be included in the CPMP if an owner or operator is electing to comply with the facial velocity requirement of Section 226.155(c) by means of the total enclosure measurement method in subsection (b)(2), i.e., monitoring data. Finally, subsection (d)(3) sets forth the particular measures that must be included in the CPMP if an owner or operator is electing to comply with the average differential pressure requirement of Section 226.155(c) by means of the total enclosure measurement method in subsection (c), i.e., instrumentation to monitor the pressure differential between the interior and exterior of the enclosure.

Subsection (e) provides that an owner or operator electing to change the total enclosure measurement method must notify the Illinois EPA of the measurement method by which the owner or operator will comply with the requirements of Section 226.160. Any such notification shall include an updated CPMP complying with the appropriate requirements for the new measurement method and said notification must occur at least 30 days prior to changing the measurement method.

Section 226.165 **Inspection**

This Section sets forth the inspection requirements that apply to owners or operators of lead emission units subject to Part 226. Subsection (a) provides that the owner or operator must inspect control devices for the control of lead particulate at least

once per month. Meanwhile, subsection (b) provides that the owner or operator must inspect all total enclosures for proper operation and physical integrity at least once per month. Subsection (c) requires the owner or operator to maintain and repair any control device and any total enclosure to ensure proper and compliant operation.

Section 226.170 **Lead Fugitive Dust Operating Program**

This Section sets forth the requirements for a lead fugitive dust operating program. Subsection (a) provides that an owner or operator of a lead emission unit subject to Part 226 must operate according to a lead fugitive dust operating program for those areas, activities or events specified in this subsection. The lead fugitive dust program is required to detail those measures that are to be implemented to minimize lead fugitive dust emissions.

Subsection (b) requires the development and maintenance of a lead fugitive dust operating program, approved by the Illinois EPA. Subsection (b) further requires the owner or operator of a lead emission unit subject to Part 226 to operate according to the lead fugitive dust operating program at all times.

Subsection (c) sets forth the particular measures that must be included in the lead fugitive dust operating program. The program must, at a minimum, include the following: (1) Meet the requirements of 35 Ill. Adm. Code 212, Subpart K; (2) Cleanings must be performed at specified frequencies by a particular wet wash methodology or by a vacuum cleaner equipped with a filter rated by the manufacturer to achieve a specified capture efficiency; (3) All areas within property boundaries subject to vehicle traffic must be paved and cleaned at least once every seven calendar days by a vacuum truck equipped with a filter rated by the manufacturer to achieve a specified capture efficiency,

a wet sweeper or a combination thereof; (4) Battery storage areas that are not located in a total enclosure must be inspected every seven calendar days and any broken batteries including residue must be appropriately collected and stored; (5) All maintenance activities that could generate dust containing lead must be performed in a manner that minimizes emissions of dust; (6) The transport of lead-containing material must meet certain minimum requirements so as to minimize the spillage of lead-containing material or the formation of dust; (7) The replacement of control equipment filter bags must be conducted according to certain minimum requirements; and (8) All measures, including those specified in subsections (c)(1) through (c)(7) must be implemented to minimize the tracking of dust containing lead out of the total enclosure.

Subsection (d) requires that all grounds on any source subject to Part 226 must be paved, oiled or have sufficient groundcover to minimize wind-blown dust leaving the property. Subsection (e) provides that the applicability of Part 226 to an owner or operator of a lead emission unit does not exempt the owner or operator from compliance with applicable requirements in Part 212.

Section 226.175 **Emissions Testing**

This Section specifies the emissions testing requirements for lead emission units subject to Part 226. Subsection (a) states that such testing for existing lead emission units must be conducted by January 1, 2015.

Subsection (b) provides that an owner or operator that performed all testing necessary to demonstrate compliance with applicable lead emission standards prior to January 1, 2015, is not required to retest so long as the following conditions have been met: 1) All testing necessary to demonstrate compliance with applicable lead emission

standards were completed on or after January 1, 2011; 2) The results of such tests were submitted to the Illinois EPA and were not rejected by the Illinois EPA; 3) The previously tested capture system and control device(s) are still being used by the subject lead emission unit; and 4) All recordkeeping and reporting requirements in Section 226.185(i) have been met.

Subsection (c) provides that testing of lead emissions at control devices for new lead emission units subject to Part 226 must be conducted within 60 days of achieving maximum operating rate but no later than 180 days after initial startup of the new lead emission unit in accordance with Section 226.175.

Subsection (d) provides that subsequent emissions tests must be conducted at least once every five years by the owner or operator of a lead emission unit subject to Part 226. For those units that tested prior to January 1, 2015, consistent with the requirements of Section 226.175(b), the original test date shall be used as the beginning of the five-year period.

Subsection (e) states, when determined necessary by the Illinois EPA or USEPA, that testing is necessary to ascertain compliance with the applicable lead emission standards of Part 226, the owner or operator must perform testing in accordance with Section 226.175 within 90 days after receipt of a notice to test from the Illinois EPA or the USEPA, unless an alternative date is specified in the notice.

Subsection (f) requires emissions testing for lead to be completed consistent with the requirements of Section 226.175(g) through (m). Subsection (g) requires the owner or operator of a lead emission unit required to test pursuant to subsections (a), (c), (d), or (e) of this Section, to submit a testing protocol as described in USEPA's Emission

Measurement Center Guideline Document (GD-042) to the Illinois EPA at least 45 days prior to a scheduled emissions test.

Subsection (h) states that an owner or operator must notify the Illinois EPA of the scheduled date for the emissions testing at least 30 days in writing before such date and, again, five days before such date. Subsection (i) provides if, after the 30-day notice for an initially scheduled test is sent, there is a delay in conducting the scheduled test, the owner or operator is to notify the Illinois EPA of the delay.

Subsection (j) provides that an owner or operator shall submit the results of the test to the Illinois EPA no later than 60 days after completing the test. Subsection (k) identifies the methods that an owner or operator must utilize to conduct tests for lead emissions. These are set forth in 40 CFR 60, subpart A, and appendix A, particularly, Methods 1 (1 or 1A), 2 (2, 2A, 2C, or 2D), 3 (3 or 3A), and 4; and Methods 12 or 29. Subsection (l) details the particular requirements for each emissions test.

Subsection (m) states that an owner or operator of a lead emission unit that vents emissions through an uncontrolled stack must either test these emissions consistent with the requirements of 226.175 or must calculate these emissions by means of an area time-weighted average lead sample and must analyze such samples through OSHA Method 1006. Such calculations must be completed every five years as well.

Section 226.185 **Recordkeeping and Reporting**

This Section contains the recordkeeping and reporting requirements for the owner or operator of a lead emission unit. Subsection (a) provides that the owner or operator must keep and maintain all records used to demonstrate initial and ongoing compliance with the requirements of Part 226. This subsection also provides that, except as

otherwise provided in Part 226, copies of such records must be submitted by the owner or operator of the source to the Illinois EPA within 30 days after receipt of a written request by the Illinois EPA; such records must be kept and maintained at the source for at least five years; and must be available for inspection and copying by the Illinois EPA.

Subsection (b) provides that the Illinois EPA must be notified within 30 days after initial startup of any new lead emission subject to Part 226.

Subsection (c) provides that the owner or operator of an emission unit subject to Part 226 must maintain the following records that demonstrate compliance with this Part:

(1) Calendar date of the record; (2) Reports for all applicable lead emissions tests conducted on the unit, including results; (3) The date, time, and duration of any malfunction in the operation of any lead emission unit, any lead emission unit's control equipment, or any emissions monitoring equipment, including a description of the malfunction, corrective maintenance activity and any preventative action taken; (4) A log of all inspections, cleanings, maintenance, and repair activities performed on the unit's air pollution control equipment; (5) The date and nature of all pavement cleanings including any reason for not cleaning pavement; (6) The date, time, and quantity of any spill of dust containing lead, including a description of the cleaning activity in response to the spill; (7) A log of all battery storage inspections, including a description of any broken batteries discovered and any required cleaning activities to control dust; (8) A log of all maintenance activities that could generate dust containing lead including a description of the maintenance activity and those measures implemented to minimize emissions of dust; and (9) A log of the hours of operation for all quenching operations.

Subsection (d) provides that the owner or operator of a lead emission unit subject to Part 226 must maintain records to demonstrate compliance with the operational monitoring requirements for control devices under Section 226.150(a) and (b).

Subsection (e) states that the owner or operator of a lead emission unit subject to Part 226 must maintain the Control Device Monitoring Plan required by Section 226.150(c) including the records to demonstrate compliance with the CDMP. Subsection (f) provides that the owner or operator of a lead emission unit subject to Part 226 must maintain records consistent with the CDMP set forth in Section 226.150(d) for any changes in pressure that could indicate a leak or other problem and, if applicable, every alarm arising from the leak detection system(s) monitoring a total enclosure's control device. The required records include a log of all investigations into and the cause of such pressure changes and, if applicable, every alarm and any ensuing maintenance and repair activities.

Subsection (g) requires an owner or operator of a lead emission unit subject to Part 226 to maintain records demonstrating compliance with the Lead Fugitive Dust Operating Program and the activities required by Section 226.170.

Subsection (h) states that an owner or operator of a lead emission unit subject to Part 226 must maintain the following records for each period that an affected unit operated without its control equipment for lead and had the potential for emissions: (1) The date, time, and duration of the outage; (2) The length of time the affected lead emission unit operated uncontrolled before required control measures were in place or the affected unit was shut down and an explanation why the time the affected unit operated uncontrolled was not shorter including a description of any mitigating measures

implemented; (3) A discussion of the probable cause of the outage of the control equipment; and (4) A discussion of any preventative measures taken to avoid future outages.

Subsection (i) states that the owner or operator of a lead emission unit subject to Part 226 must maintain records demonstrating compliance with emissions testing requirements set forth in Section 226.175.

Subsection (j) states that the owner or operator of a lead emission unit subject to Part 226 must maintain records to demonstrate compliance with the inspection requirements for control devices in Section 226.165(a) and (c). Subsection (k) requires the owner or operator to maintain a log of all inspections of any total enclosures and source structures to demonstrate compliance with the inspection requirements for total enclosures in Section 226.165(b) and (c). Records must be maintained, as well, to verify compliance with the obligation in Section 226.155(e) that any total enclosure must generally be free of cracks, gaps, corrosion, or other deterioration. Finally, subsection (k) requires that records must document compliance with Section 226.160(a) providing that an owner or operator must measure the total area of all natural draft openings and the total surface area of the total enclosure.

Subsection (l) requires the owner or operator of a lead emission unit subject to Part 226 keep records verifying compliance with the requirements of 226.155(c) (e.g., each total enclosure is maintained and operated with an inward flow of air through all natural draft openings while the applicable lead emission unit is operating). In addition, the owner or operator shall maintain documentation demonstrating compliance with the

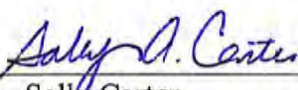
Continuous Parametric Monitoring Plan as required by the operational measurement requirements for total enclosure in Section 226.160.

Subsection (m) requires the owner or operator of lead emission unit subject to Part 226 notify the Illinois EPA within five days of discovery of deviations from requirements of this Part or any exceedance of an applicable emission limitation; this subsection also sets forth the minimum information that must be included in such notifications. Subsection (n) requires the submission of semiannual reports and sets forth the timing of such submittals and the information that must be included in the aforementioned reports. All such reports must be certified by a responsible official that the information is complete, true and accurate.

IX. CONCLUSION

For the reasons stated above, the Illinois EPA hereby submits this regulatory proposal and requests the Board adopt these regulations for the State of Illinois.

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: 
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Division of Legal Counsel

DATED: November 12, 2013

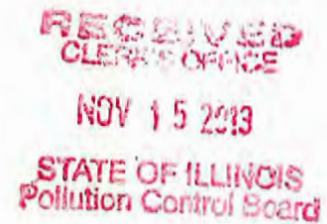
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TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE B: AIR POLLUTION

CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER c: EMISSION STANDARDS AND LIMITATIONS
FOR STATIONARY SOURCES

PART 226
STANDARDS AND LIMITATIONS FOR CERTAIN SOURCES OF LEAD

Section:	
226.100	Severability
226.105	Scope and Organization
226.110	Abbreviations and Acronyms
226.115	Definitions
226.120	Incorporations by Reference
226.125	Applicability
226.130	Compliance Date
226.140	Lead Emission Standards
226.150	Operational Monitoring for Control Device
226.155	Total Enclosure
226.160	Operational Measurement for Total Enclosure
226.165	Inspection
226.170	Lead Fugitive Dust Operating Program
226.175	Emissions Testing
226.185	Recordkeeping and Reporting



AUTHORITY: Authorized by Sections 10, 27, and 28.2 of the Environmental Protection Act [415 ILCS 5/10, 27, and 28.2]

SOURCE: Adopted at __ Ill. Reg. ____, effective _____.

Section 226.100 Severability

If any Section, subsection, or clause of this Part is found invalid, such finding shall not affect the validity of this Part as a whole or any Section, subsection, or clause not found invalid.

Section 226.105 Scope and Organization

- a) This Part sets standards and limitations for emissions of lead from stationary sources.
- b) Notwithstanding the provisions of this Part, the air quality standards contained in 35 Ill. Adm. Code 243 must not be violated.

Section 226.110 Abbreviations and Acronyms

The following abbreviations and acronyms are used in this Part:

Act	Illinois Environmental Protection Act, 415 ILCS 5/1 <i>et seq.</i>
CPMP	continuous parametric monitoring plan
CDMP	control device monitoring plan
fpm	feet per minute
FV	facial velocity
gr/dscf	grains per dry standard cubic foot
Hg	mercury
Illinois EPA	Illinois Environmental Protection Agency
m/hr	meters per hour
mg/l	milligrams per liter
OSHA	Occupational Safety & Health Administration
Pb	lead
USEPA	United States Environmental Protection Agency

Section 226.115 Definitions

The following definitions apply for the purposes of this Part. Unless otherwise defined in this Section or a different meaning for a term is clear from its content, all terms not defined herein shall have the meaning given them in the Act and in 35 Ill. Adm. Code 211.

“Agglomerating furnace” means a furnace used to melt into a solid mass flue dust that is collected from a baghouse.

“Alloy” means a mixture or metallic solid solution composed of two or more elements.

“Alloying” means the process of combining or mixing metals or other substances in molten form for the purpose of producing a particular alloy.

“Alloying and refining kettle” means an open-top vessel that is heated from below and contains molten lead for the purpose of alloying and refining the lead. Such kettles include, but are not limited to, pot furnaces, receiving kettles, and holding kettles.

“Battery breaking area” means the source location at which lead-acid batteries are broken, crushed, disassembled, or separated into components.

“Casting” means the process of transferring molten lead-containing metal to a mold.

“Dross” means solid impurities removed from molten lead in lead kettles.

“Dryer” means a chamber that is heated and that is used to remove moisture from lead-bearing materials other than lead shot.

“Existing lead emission unit” means a lead emission unit in existence before January 1, 2015, at a nonferrous metal production facility.

“Housekeeping activities” means regular cleaning or maintenance activities conducted to reduce fugitive emissions from production areas.

“Induction furnace” means an electrical furnace used for heating metal by electromagnetic induction.

“Lead” means elemental lead or alloys in which the predominant component is lead (*i.e.*, lead being more prevalent than any other single component).

“Lead-bearing scrap” or “Lead-containing material” or “Lead-containing metal” or “Lead-containing wastes” or “Lead particulate” means scrap or material or metal or wastes or particulate with a lead content equal to or greater than 5 mg/l as measured by EPA Method 1311.

“Lead emission unit” means any process that emits lead including, but not limited to, battery breaking areas; material handling areas; dryers and dryer areas; channel furnaces and channel furnace areas; coreless furnaces and coreless furnace areas; reverberatory furnaces and reverberatory furnace areas; rotary furnaces and rotary furnace areas; agglomerating furnaces and agglomerating furnace areas; kettles and casting areas; lead taps, slag taps, and molds during tapping; and areas where dust from fabric filters, sweepings, or used fabric filters are processed.

“Lead kettle” means a vessel that is heated from below and is used for the purpose of melting refined lead.

“Lead tap” means the pouring hole through which molten lead flows from a kettle or furnace.

“Leak detection system” means an instrument that is capable of monitoring relative particulate matter (dust) loadings in the exhaust of a particulate control in order to detect leaks in such control. A leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light scattering, transmittance, or other effect to monitor relative particulate matter loadings.

“Materials handling area” means any area in which lead-containing materials (including, but not limited to, broken battery components, flue dust, and dross) are handled in between process steps. Such areas may include, but are not limited to, areas in which lead-bearing scrap, lead-containing materials, lead-containing metal, or lead-containing wastes are prepared.

“Materials storage area” means any area in which lead-containing materials (including, but not limited to, broken battery components, flue dust, and dross) are stored in between process steps. Such areas may include, but are not limited to, areas in which lead-bearing scrap, lead-containing materials, lead-containing metal, or lead-containing wastes are stored in open piles, bins, or tubs.

“Mold cooling” means the process of cooling a mold containing hot metal by direct contact of the mold, but not the hot metal itself, with cooling water or other liquids.

“Natural draft opening” means any permanent opening, including doors and windows, in a total enclosure that remains open during operation of the lead emissions unit in the enclosure(s) and is not connected to a duct in which a fan is installed.

“New lead emission unit” means a lead emission unit constructed on or after January 1, 2015, at a nonferrous metal production facility.

“Nonferrous metal” means a metal that is not an iron or steel alloy; such metals may include alloys of aluminum, copper, lead, and zinc.

“Nonferrous metal production facility” means any source that is alloying, refining, or casting nonferrous metal or manufacturing nonferrous metal products, and where the source includes lead in their alloys or products by design.

“Production areas” means an indoor space at a nonferrous metal production facility where lead emission units are operated.

“Quenching” means the process of cooling hot metal other than lead shot by direct contact of the metal with cooling water or other liquids.

“Refined lead” means a material composed of lead alloys of a specified composition from an onsite or offsite lead refining operation.

“Refining” means the process of removing impurities or oxides from a metal or metal alloy.

“Reverberatory furnace” means a refractory-lined furnace that uses one or more flames to heat the walls and roof of the furnace and lead-bearing scrap to such a temperature that lead compounds are chemically reduced to elemental lead metal.

“Rotary furnace” (also known as a rotary reverberatory furnace) means a furnace consisting of a refractory-lined chamber that rotates about a horizontal axis and that uses one or more flames to heat the walls of the furnace and lead-bearing scrap to such a temperature that lead compounds are chemically reduced to elemental lead metal.

“Slag tap” means the pouring hole through which slag is removed from a kettle or furnace.

“Tap” means the pouring hole through which molten metal flows from a kettle or furnace.

“Tapping” means opening the tap.

“Total enclosure” means a complete enclosure with walls and a roof designed to minimize exposure to the elements and to maximize containment of emissions from one or more lead emission units and that meets the following performance standards: the average facial velocity of air flowing into the enclosure through all natural draft openings during operation of lead emission units in each total enclosure in any one hour period must be at least 200 fpm (3,600 m/hr) or average negative pressure value of 0.007 inches of water (0.013 mm Hg) must be maintained inside the enclosure over any one hour period.

“Valid test run” means a completed test run conducted in accordance with a testing protocol submitted to the Illinois EPA, as required under Section 226.175(f) of this Part.

Section 226.120 Incorporations by Reference

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

- a) 75 FR 71033-01, Air Quality Designations for the 2008 Lead (Pb) National Ambient Air Quality Standards (Monday, November 22, 2010).
- b) 76 FR 72097-01, Air Quality Designations for the 2008 Lead (Pb) National Ambient Air Quality Standards (Tuesday, November 22, 2011).
- c) 40 CFR 60, Appendix A, Method 29 (2012).
- d) 40 CFR 60, Appendix A, Method 1, 1A (2012).
- e) 40 CFR 60, Appendix A, Method 2, 2A, 2C, and 2D (2012).
- f) 40 CFR 60, Appendix A, Method 3, 3A (2012).
- g) 40 CFR 60, Appendix A, Method 4 (2012).
- h) 40 CFR 60, Appendix A, Method 12 (2012).
- i) USEPA’s Emission Measurement Center Guideline Document, (GD-042), Preparation and Review of Site-Specific Emission Test Plans, Revised March 1999.
- j) 40 CFR 260.11(c)(3)(v) and 261, Method 1311 (2012).
- k) OSHA. The following method from the Occupational Safety & Health Administration, Methods Development Team, Industrial Hygiene Chemistry Division, OSHA Salt Lake Technical Center, Sandy, UT 84070-6406, (801) 233-4900: OSHA Method 1006 (approved January 2005).

Section 226.125 Applicability

The provisions of this Part apply to all nonferrous metal production facilities located in the following areas in Illinois designated nonattainment for the 2008 lead National Ambient Air Quality Standards by USEPA in:

- a) Part of Madison County, specifically the area bounded by Granite City Township and Venice Township, 75 FR 71033-01 (November 22, 2010).
- b) Part of Cook County, specifically, the area bounded by Damen Avenue on the west, Roosevelt Road on the north, the Dan Ryan Expressway on the east, and the Stevenson Expressway on the south, 76 FR 72097-01 (November 22, 2011).

Section 226.130 Compliance Date

- a) For an existing lead emission unit that is subject to this Part, compliance with these requirements by an owner or operator of the unit is required by no later than January 1, 2015.
- b) For a new lead emission unit that is subject to this Part, compliance with these requirements by an owner or operator of the unit is required by the date on which the unit initially begins operation.

Section 226.140 Lead Emission Standards

- a) For all alloying and refining kettles located at a source subject to this Part pursuant to Section 226.125 of this Part, each lead emission unit must be:
 - 1) Equipped with a capture system (including covers, hoods, ducts, and fans) that is vented to a control device for lead particulates. The emissions of lead into the atmosphere from each control device must not exceed 0.0010 gr/dscf; and
 - 2) Operated in a total enclosure pursuant to Section 226.155 of this Part. The entire gas stream collected by each total enclosure must only be ducted to a control device such that the emissions of lead into the atmosphere from such control device must not exceed 0.00010 gr/dscf.
- b) For reverberatory furnaces or rotary furnaces located at a source subject to this Part pursuant to Section 226.125 of this Part, each lead emission unit must be:
 - 1) Equipped with a capture system (including hoods, ducts, and fans) that is vented to a control device for lead particulates. The emissions of lead into the atmosphere from each control device must not exceed 0.00010 gr/dscf; and
 - 2) Operated in a total enclosure pursuant to Section 226.155 of this Part. The entire gas stream collected by each total enclosure must only be ducted to

a control device such that the emissions of lead into the atmosphere from such control device must not exceed 0.00010 gr/dscf.

- c) Notwithstanding the provisions for total enclosure in subsections (a) and (b) above, any emissions of lead exiting an uncontrolled stack during quenching or mold cooling operations must not exceed 0.00010 gr/dscf. Quenching operations shall be limited to no more than 6 hours per associated unit in any 24 hour period.
- d) For induction furnaces located at a source subject to this Part pursuant to Section 226.125 of this Part, each lead emission unit must be equipped with a capture system (including hoods, ducts, and fans) that is vented to a control device for lead particulates. The emissions of lead into the atmosphere from each control device must not exceed 0.000010 gr/dscf.
- e) For all other furnaces, lead kettles, or any other operation subject to this Part pursuant to Section 226.125 of this Part, but not subject to subsections (a), (b), or (d) above, each lead emission unit must be equipped with a capture system (including ducts, fans, and hoods or covers) that is vented to a control device for lead particulates. The emissions of lead into the atmosphere from each control device must not exceed 0.00010 gr/dscf.
- f) Any source subject to the requirements of this Part pursuant to Section 226.125 of this Part must operate pursuant to a lifetime operating permit, a federally enforceable state operating permit, a Clean Air Act Permit Program permit, or conditions within a construction permit.

Section 226.150 Operational Monitoring for Control Device

- a) The owner or operator of a lead emission unit subject to this Part must install, maintain, and operate parametric monitoring equipment that consists of a pressure differential system to measure the pressure drop across each control device required by Section 226.140 of this Part. Data from this instrumentation must be recorded as follows:
 - 1) Data must be automatically recorded every minute during operation of any lead emission unit subject to Section 226.140(a) or (b) of this Part.
 - 2) Data must be recorded at least once every eight hours during operation of any lead emission unit subject to Section 226.140(d) or (e) of this Part.
 - 3) If the control device used to control lead emission units subject to Section 226.140(a) or (b) of this Part is the same as the control device used to control other lead emission units subject to Section 226.140(d) or (e) of this Part, the requirements in subsection (a)(1) above apply to the control device.

- b) The owner or operator of a lead emission unit subject to this Part and using a baghouse or other filter system to control units subject to the total enclosure requirements of Section 226.155 of this Part must install, maintain, and operate parametric monitoring equipment that consists of a leak detection system. The leak detection system must be installed at the outlet of the baghouse or other filter system.
- c) The owner or operator of a lead emission unit subject to this Part must develop and maintain a Control Device Monitoring Plan (CDMP). The CDMP must be submitted for review and approval to the Illinois EPA, directed to the Manager of the Bureau of Air's Compliance Section by the compliance date specified in Section 226.130 of this Part and within 30 days after any changes are made to such plan. The CDMP must be amended by the owner or operator of a lead emission unit subject to this Part as necessary to ensure that it is kept current.
- d) The CDMP must include procedures to investigate and determine the cause of changes in pressure that could indicate a leak or other problem and, if applicable, every alarm from the leak detection system. The procedures must also include a means to determine appropriate corrective actions and preventative measures to address such pressure changes and to avoid future alarms. The owner or operator of a lead emission unit subject to this Part must operate and maintain each pressure differential system and each leak detection system according to the CDMP at all times.

Section 226.155 Total Enclosure

- a) An owner or operator of a lead emission unit subject to this Part must install, maintain, and operate one or more total enclosures to minimize fugitive emissions from the operations listed in subsections (1) through (6) below at all times that the applicable lead emission unit in the total enclosure is operating or housekeeping activities are being performed. The total enclosure must meet the requirements specified in subsections (b) through (e) below.
 - 1) Battery breaking areas.
 - 2) Dryer and dryer areas including transition pieces, charging hoppers, chutes, and skip hoists conveying any lead-containing material.
 - 3) Reverberatory furnaces or rotary furnaces charging any lead-containing material and the associated reverberatory furnace areas or rotary furnace areas, including any associated lead taps, slag taps, and molds during processing.
 - 4) Alloying and refining kettles and associated areas, including any associated lead taps, slag taps, and molds during processing.

- 5) Areas where dross, dust from fabric filters, sweepings, or used fabric filters are handled except for areas where all such materials are in closed, leak-proof containers at all times.
- 6) Material handling areas for any lead-containing materials except that the following areas are exempt from the total enclosure requirements unless the areas listed below also contain operations listed in subsections (1) through (5) above:
 - (A) Those areas where refined lead is melted and cast;
 - (B) Those areas where spent refractory brick is stored in closed containers prior to and after crushing;
 - (C) Those areas where ladle repairs take place;
 - (D) Those areas where lead-bearing scrap is sorted and handled if the area is enclosed and equipped with a capture system ducted to a control device subject to the requirements of Section 226.140(e) of this Part during all sorting and handling activities and if such scrap is stored in closed containers at all other times.
- b) An owner or operator of a lead emission unit subject to this Part must duct the gas stream collected by each total enclosure to a control device that meets the applicable requirements of Section 226.140 of this Part.
- c) The total enclosure must be maintained and operated with an inward flow of air through all natural draft openings while the lead emission unit applicable to the operation listed in subsection (a) above in the total enclosure is operating. The average facial velocity of air flowing into the enclosure through all natural draft openings during operation of such lead emission units in each total enclosure in any one hour period must be at least 200 fpm (3,600 m/hr) or average negative pressure value of 0.007 inches of water (0.013 mm Hg) must be maintained inside the enclosure over any one hour period.
- d) The total enclosure required by subsection (a) above must be maintained at any opening including, but not limited to, vents, windows, passages, doorways, bay doors, and roll-ups while lead emission units in the total enclosure(s) are operating, except as needed for temporary access to conduct manufacturing operations (e.g., during load-in and load-out of materials or passage of personnel or equipment).
- e) The total enclosure must be free of cracks, gaps, corrosion, or other deterioration that could cause or result in dust being emitted to the atmosphere through such openings except that the total area of all natural draft openings must not exceed 5 percent of the surface area of the total enclosure's walls, floor, and ceiling.

Section 226.160 Operational Measurement for Total Enclosure

- a) An owner or operator of a lead emission unit subject to the total enclosure requirement of Section 226.155 of this Part must measure the total area of all natural draft openings and the total surface area of the total enclosure.
- b) An owner or operator of a lead emission unit subject to the total enclosure requirement of Section 226.155 of this Part must measure the facial velocity (FV) of air flowing through all natural draft openings using the following equation while any lead emission unit applicable to the operation listed in Section 226.155(a) of this Part is operating. Values for Q_o and Q_i must be obtained by means of testing pursuant to subsection (b)(1) or monitoring pursuant to subsection (b)(2) below:

$$FV = \frac{Q_o - Q_i}{A_n}$$

Where:

Q_o = the sum of volumetric flow from all gas streams exiting the total enclosure through the control device.

Q_i = the sum of the volumetric flow from all gas streams into the total enclosure through a forced makeup air duct; zero if there is no forced makeup air into the total enclosure.

A_n = total area of all natural draft openings in the total enclosure.

- 1) An owner or operator of a lead emission unit subject to the total enclosure requirement of Section 226.155 of this Part must conduct testing to determine the values for Q_o and Q_i at the same time as any emissions testing is conducted pursuant to Section 226.175 of this Part; or
 - 2) An owner or operator of a lead emission unit subject to the total enclosure requirement of Section 226.155 of this Part must install, maintain, and operate a flow monitor at the outlet of each control device required by Section 226.140 of this Part to measure the volumetric flow from all gas streams exiting the total enclosure through the control device (or the final control device emitting to the atmosphere if the source has more than one control device in series). This volumetric flow data must be monitored and automatically recorded every minute.
-
- c) As an alternative to compliance with the requirements of subsection (b) above, an owner or operator of a lead emission unit subject to the total enclosure requirement of Section 226.155 of this Part must install, operate, and maintain

instrumentation to monitor the pressure differential between the interior and exterior of the enclosure, measured in inches of water, to demonstrate compliance with the differential pressure requirements in Section 226.155(c) of this Part. This instrumentation must be located and designed to operate in accordance with all of the requirements of subsections (c)(1) through (6) below:

- 1) An owner or operator of a total enclosure that has a total ground surface area of 10,000 square feet or more must install and maintain a minimum of one building digital differential pressure monitoring system at each of the following three walls in each total enclosure:
 - A) The leeward wall.
 - B) The windward wall.
 - C) An exterior wall that connects the leeward and windward wall at a location defined by the intersection of a perpendicular line between a point on the connecting wall and a point on its furthest opposite exterior wall, and intersecting within plus or minus ten meters of the midpoint of a straight line between the two other monitors specified. The midpoint monitor must not be located on the same wall as either of the other two monitors.
 - 2) An owner or operator of a total enclosure that has a total ground surface area of less than 10,000 square feet must install and maintain a minimum of one building digital differential pressure monitoring system at the leeward wall of each total enclosure.
 - 3) Each digital differential pressure monitoring system must be certified by the manufacturer to be capable of measuring and displaying negative pressure in the range of 0.001 to 0.11 inches of water (0.002 to 0.2 mm mercury) with a minimum accuracy of plus or minus 0.001 inches of water (0.002 mm mercury).
 - 4) Each digital differential pressure monitoring system must be equipped with a continuous recorder.
 - 5) Each digital differential pressure monitoring system must be calibrated in accordance with manufacturer's specifications at least once every 12 calendar months or more frequently if recommended by the manufacturer.
 - 6) Each digital differential pressure monitoring system must be equipped with a backup, uninterruptible power supply to ensure continuous operation of the monitoring system during a power outage.
- d) An owner or operator of a lead emission unit subject to the total enclosure requirement of Section 226.155 of this Part must develop and maintain a continuous parametric monitoring plan (CPMP) containing the information

required in subsections (d)(1), (2), or (3) below. The CPMP must be submitted for review and approval to the Illinois EPA, directed to the Manager of the Bureau of Air's Compliance Section, by the compliance date specified in Section 226.130 of this Part and within 30 days after any changes are made to such plan. The CPMP must be amended by the owner or operator of a lead emission unit subject to this Part as necessary to ensure that it is kept current. The owner or operator of a lead emission unit subject to this Part must conduct monitoring in accordance with the CPMP at all times.

- 1) If electing to comply with the facial velocity requirement in Section 226.155(c) of this Part using the total enclosure measurement method in subsection (b)(1) above, the CPMP must contain the information required by subsections (d)(1)(A) through (D) below.
 - A) The CPMP must identify the operating parameters to be monitored on an ongoing basis to ensure that the facial velocity measured during the most recent compliance test is maintained, explain why such parameters are appropriate for demonstrating ongoing compliance, and identify the specific monitoring procedures for each parameter.
 - B) The CPMP must specify limits or ranges of values of the operating parameters listed pursuant to subsection (d)(1)(A) above that demonstrate compliance with the facial velocity requirements in Section 226.155(c) of this Part. These limits or ranges must represent the conditions indicative of proper operation and maintenance of the facial velocity through all natural draft openings during operation of lead emission units in each total enclosure.
 - C) The CPMP must specify data to be recorded to demonstrate compliance with the facial velocity requirements in Section 226.155(c) of this Part as well as the recording frequency and methodology.
 - D) The CPMP must specify the information to be reported to the Illinois EPA to demonstrate compliance with the facial velocity requirements in Section 226.155 (c) of this Part. This information must include, but is not limited to, all information to be submitted as part of the semiannual reports required by Section 226.185(n) of this Part as well as the reporting frequency.
- 2) If electing to comply with the facial velocity requirement in Section 226.155(c) of this Part using the total enclosure monitoring method in subsection (b)(2) above, the CPMP must contain the information required by subsections (d)(2)(A) through (C) below.

- A) The CPMP must specify limits or ranges of values of the sum of volumetric flow from all gas streams exiting the total enclosure through the control device and the sum of the volumetric flow from all gas streams into the total enclosure through a forced makeup air duct. These limits or ranges must represent the conditions indicative of proper operation and maintenance of the facial velocity through all natural draft openings during operation of lead emission units in each total enclosure.
 - B) The CPMP must specify data to be recorded to demonstrate compliance with the facial velocity requirements in Section 226.155(c) of this Part as well as the recording frequency and methodology.
 - C) The CPMP must specify the information to be reported to the Illinois EPA to demonstrate compliance with the facial velocity requirements in Section 226.155 (c) of this Part. This information must include, but is not limited to, all information to be submitted as part of the semiannual reports required by Section 226.185(n) of this Part as well as the reporting frequency.
- 3) If electing to comply with the average differential pressure requirement in Section 226.155(c) of this Part using the total enclosure measurement method in subsection (c) above, the CPMP must contain the information required by subsections (d)(3)(A) through (C) below.
- A) The CPMP must identify the locations and design of each differential pressure monitoring instrumentation demonstrating compliance with the requirements of subsection (c) above to ensure that the average differential pressure is measured properly, explain why such locations are appropriate for demonstrating ongoing compliance, and provide a schedule for instrumentation calibration.
 - B) The CPMP must specify data to be recorded to demonstrate compliance with the average differential pressure requirements in Section 226.155(c) of this Part as well as the recording frequency and methodology.
 - C) The CPMP must specify the information to be reported to the Illinois EPA to demonstrate compliance with the average differential pressure requirements in Section 226.155(c) of this Part. This information must include, but is not limited to, all information to be submitted as part of the semiannual reports

required by Section 226.185(n) of this Part as well as the reporting frequency.

- e) The owner or operator of a lead emission unit subject to this Part electing to change the total enclosure measurement method for an existing lead emission unit subject to the total enclosure requirements of Section 226.155 of this Part must notify the Illinois EPA, directed to the Manager of the Bureau of Air's Compliance Section, of the measurement method by which the owner or operator will comply with the requirements of this Section. Such notification must include an updated CPMP complying with the appropriate requirements for the new measurement method and must occur at least 30 days prior to changing the method.

Section 226.165 Inspection

- a) An owner or operator of a lead emission unit subject to this Part must inspect control devices for the control of lead particulate at least once per month. Such inspections of control devices must include all structures that comprise the infrastructure of the affected control device and other structures which are necessary for the affected control device to function in its intended capacity.
- b) An owner or operator of a lead emission unit subject to this Part must inspect all total enclosures for proper operation and physical integrity at least once per month.
- c) An owner or operator of a lead emission unit subject to this Part must maintain and repair any control device and total enclosure, including all structures that comprise the infrastructure of the affected control device and total enclosure, as necessary to ensure proper and compliant operation.

Section 226.170 Lead Fugitive Dust Operating Program

- a) An owner or operator of a lead emission unit subject to this Part must operate at all times according to a lead fugitive dust operating program that describes in detail the measures that are implemented to minimize lead fugitive dust emissions from the areas, activities, or events listed in subsections (a)(1) through (7) below:
 - 1) Source roadways;
 - 2) Source buildings housing lead emission units;
 - 3) Battery storage area;
 - 4) Equipment maintenance for equipment used in connection with the processing or handling of lead-containing materials;

- 5) Material storage and material handling areas for lead-containing materials, excluding areas where only finished products are stored or handled;
 - 6) Spillage of lead-containing material; and
 - 7) Sorting or handling of lead-bearing scrap subject to Section 226.155(a)(6)(D) of this Part.
- b) An owner or operator of a lead emission unit subject to this Part must develop and maintain a lead fugitive dust operating program. The lead fugitive dust operating program must be submitted for review and approval to the Illinois EPA, directed to the Manager of the Bureau of Air's Compliance Section, by the compliance date specified in Section 226.130 of this Part and within 30 days after any changes are made to such plan. The lead fugitive dust operating program must be amended by the owner or operator of a lead emission unit subject to this Part as necessary to ensure that it is kept current. The owner or operator of a lead emission unit subject to this Part must operate according to the lead fugitive dust operating program at all times.
- c) The measures specified in the lead fugitive dust operating program must, at a minimum, include the requirements specified in subsections (c)(1) through (8) below.
- 1) The lead fugitive dust operating program must meet all requirements of 35 Ill. Adm. Code 212.Subpart K.
 - 2) Cleanings must be performed by wet wash or by a vacuum cleaner equipped with a filter rated by the manufacturer to achieve at least 99.97 percent capture efficiency for 0.3 micron particles in a manner that does not generate fugitive dust. When performing cleanings by wet wash, a wet sweeper must employ a water flush followed by sweeping. Cleanings must be performed at the frequencies specified below:
 - A) Cleanings must be performed at least once every 24 hour period that a lead emission unit in an associated production area is operating and immediately before termination of negative pressure in any total enclosure required by Section 226.155 of this Part for all production areas.
 - B) Cleanings of scrap sorting and handling areas subject to Section 226.155(a)(6)(D) of this Part must be performed directly after sorting or handling is completed and before shutdown of the required capture and control equipment.
 - C) Cleanings must be performed at least once every seven calendar days for all areas where lead-containing wastes generated from

housekeeping activities are stored, disposed of, recovered, or recycled.

- D) Cleanings of all areas must be performed no later than one hour after detection of any accidental release of dust containing lead.
-
- 3) All areas within the property boundaries subject to vehicle traffic must be paved and must be cleaned at least once every seven calendar days to remove dust or other accumulated material from paved areas within the property boundaries. Such cleaning must be performed using a vacuum truck with a filter rated by the manufacturer to achieve at least 99.97 percent capture efficiency for 0.3 micron particles, or a wet sweeper, or a combination thereof. Limited access and limited use roadways such as unpaved roads to remote locations on the property are exempt from this requirement if they are used infrequently (no more than one round trip per day).
 - 4) Broken batteries must only be stored in a total enclosure. Any battery storage areas that are not located in a total enclosure must be inspected at least once every seven calendar days. Within 72 hours of identification, any broken batteries must be moved to a total enclosure and all residue from broken batteries must be collected and the area must be cleaned.
 - 5) All maintenance activities that could generate dust containing lead must be performed in a manner that minimizes emissions of dust including, but not limited to, the use of a vacuum cleaner equipped with a filter rated by the manufacturer to achieve at least 99.97 percent capture efficiency for 0.3 micron particles or the use of wet suppression sufficient to prevent dust formation.
 - 6) All collected dross and dust must be stored and transported within closed conveyor and storage systems or in closed, leak-proof containers. All other lead-containing material must be contained and covered for transport outside of a total enclosure in a manner that minimizes spillage or dust formation. The transport outside of a total enclosure of scrap metal, spent refractory brick, ladles, and finished product must be addressed in the lead fugitive dust operating program so as to minimize the spillage of lead-containing material or the formation of dust.
 - 7) Replacement of control equipment filter bags must be conducted in the manner specified below. All vacuuming referenced in this subsection must be performed by a vacuum cleaner equipped with a filter rated by the manufacturer to achieve at least 99.97 percent capture efficiency for 0.3 micron particles:
-

- A) Used filter bags must be rolled-up and placed into sealed plastic bags or barrels prior to removal from the filter unit.
 - B) The filter unit floors, the dirty and clean plenum side, must be vacuumed of dust residues immediately following removal activity.
 - C) The ground surface in and around the filter unit must be vacuumed immediately following the complete installation of new filter bags to remove any and all dust residue.
 - D) In those instances where filter bag replacement requires more than one operational day, the requirements of subsection (c)(7)(C) above must be completed just prior to the end of each operational day.
- 8) Measures including, but not limited to, those specified in subsections (1) through (7) above must be implemented to minimize the tracking of dust containing lead out of the total enclosure by personnel or by equipment used in handling the material.
- d) All grounds on any source subject to this Part must be paved, oiled, or have sufficient groundcover planted to minimize the amount of wind-blown dust leaving the property.
 - e) The applicability of this Part to the owner or operator of a lead emission unit does not exempt the owner or operator from compliance with the applicable requirements in 35 Ill. Adm. Code 212.

Section 226.175 Emissions Testing

- a) For an existing lead emission unit that is subject to this Part, testing of lead emissions at control devices required by Section 226.140 of this Part must be conducted by January 1, 2015.
- b) The owner or operator of an existing lead emission unit that is subject to this Part and that performed all testing necessary to demonstrate compliance with Section 226.140 of this Part prior to January 1, 2015, is not required to retest pursuant to subsection (a) above if the conditions in subsections (b)(1) through (b)(4) below are met. Nothing in this subsection (b), however, shall limit the ability of the Illinois EPA or the USEPA to require that the owner or operator perform testing pursuant to subsection (e) below.
 - 1) On or after January 1, 2011, the owner or operator of an existing lead emission unit that is subject to this Part performed all testing necessary to demonstrate compliance with Section 226.140 of this Part;

- 2) The owner or operator submitted the results of such tests to the Illinois EPA, and the tests were not rejected by the Illinois EPA;
 - 3) The same capture system and control device(s) tested as referenced in subsection (b)(1) above are still being used by the subject lead emission unit; and
 - 4) The owner or operator complies with all recordkeeping and reporting requirements in Section 226.185(i) of this Part.
- c) For a new lead emission unit that is subject to this Part, testing of lead emissions at control devices required by Section 226.140 of this Part must be conducted within 60 days after achieving maximum operating rate but no later than 180 days after initial startup of the new lead emission unit in accordance with this Section.
- d) The owner or operator of a lead emission unit subject to this Part must have subsequent emissions tests conducted at least once every five years. The owner or operator of a lead emission unit that tested prior to January 1, 2015, in accordance with subsection (b) above must use the original test date as the beginning of this five-year period.
- e) When, determined by the Illinois EPA or USEPA, it is necessary to conduct testing to demonstrate compliance with Section 226.140 of this Part, the owner or operator of a lead emission unit subject to this Part must, at his or her own expense, have such test conducted in accordance with the applicable test methods and procedures specified in this Section within 90 days after receipt of a notice to test from the Illinois EPA or USEPA, unless such notice specifies an alternative testing deadline.
- f) The owner or operator of a lead emission unit subject to the emissions testing requirements of this Section must conduct all such tests for lead pursuant to subsections (g) through (m) below.
- g) The owner or operator of a lead emission unit required to test pursuant to subsections (a), (c), (d), or (e) above must submit a testing protocol as described in USEPA's Emission Measurement Center Guideline Document (GD-042) to the Illinois EPA, directed to the Manager of the Bureau of Air's Compliance Section, at least 45 days prior to a scheduled emissions test. Upon written request directed to the Manager of the Bureau of Air's Compliance Section, the Illinois EPA may, in its sole discretion, waive the 45-day requirement. Such waiver is only effective if it is provided in writing by the Manager of the Bureau of Air's Compliance Section, or his or her designee.
- h) Notification of a scheduled emissions test must be submitted to the Illinois EPA in writing, directed to the Manager of the Bureau of Air's Compliance Section, at least 30 days prior to the expected date of the emissions test and, again, 5 days

prior to such testing. Upon written request directed to the Manager of the Bureau of Air's Compliance Section, the Illinois EPA may, in its sole discretion, waive the 30-day requirement or the 5-day requirement. Such waiver is only effective if it is provided in writing by the Manager of the Bureau of Air's Compliance Section, or his or her designee.

- i) If, after the 30-days' notice for an initially scheduled test is sent, there is a delay (e.g., due to operational problems) in conducting the test as scheduled, the owner or operator of the lead emission unit must notify the Illinois EPA, Bureau of Air, Compliance Section as soon as practicable of the delay in the original test date, either by providing at least 7 days' notice of the rescheduled date of the test or by arranging a new test date with the Illinois EPA by mutual agreement.
- j) Not later than 60 days after the completion of the test, the owner or operator of a lead emission unit required to test pursuant to subsections (a), (c), (d), or (e) above must submit the results of the test to the Illinois EPA, directed to the Manager of the Bureau of Air's Compliance Section.
- k) The owner or operator of a lead emission unit subject to the emissions testing requirements of this Section must conduct such tests for lead emissions using 40 CFR 60, subpart A, and appendix A, Methods 1 (1 or 1A), 2 (2, 2A, 2C, or 2D), 3 (3 or 3A), and 4; and Methods 12 or 29, as incorporated by reference in Section 226.120 of this Part, or other alternative USEPA methods approved by the Illinois EPA.
- l) Each emissions test must be in accordance with all of the following requirements:
 - 1) Method 12 or 29 must be used to determine compliance with the lead emission standard in Section 226.140 of this Part.
 - 2) The minimum sample volume must be 0.85 dry standard cubic meters (30 dry standard cubic feet).
 - 3) The minimum sampling time must be 60 minutes for each run. Consistent with the averaging and compliance requirements of this subsection (l), at least three runs must be performed and the arithmetic average of three valid runs must be used to determine compliance.
 - 4) The following procedure must be used to average emissions of tests results for any compliance determination:
 - A) The average of the emissions test results must be determined by the arithmetic average of three valid test run results, as long as the test runs are conducted in conformance with the provisions of an approved testing protocol as required by subsection (g) above.

- B) Notwithstanding subsection (l)(4)(A) above, if the owner or operator of a lead emission unit elects to perform more than three test runs, then the average must be calculated based upon the results of all valid test runs.
 - C) Notwithstanding subsection (l)(4)(A) above, in the event that a sample is accidentally lost or conditions occur in which one of the test runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, malfunction, or other dissimilar or non-representative circumstances, upon the owner's or operator's documentation of the existence of any of the circumstances set forth in this subsection (l)(4)(C) and verification by the Illinois EPA, Manager of the Bureau of Air's Compliance Section, or his designee, that the conditions existed, compliance may be determined by using the arithmetic average of the test results of all remaining valid test runs; however, a minimum of two valid test runs is required to determine compliance.
- 5) Each test for lead emissions must be conducted during conditions representative of maximum lead emissions.
 - 6) If an owner or operator of a lead emission unit does not meet the criteria for averaging of subsection (l)(4) above, then each individual valid test run must meet the applicable limitation in order to demonstrate compliance.
- m) The owner or operator of any lead emission unit for which emissions are vented from an uncontrolled stack to the atmosphere must test such emissions in accordance with the requirements of this Section or calculate such emissions by means of collecting area time-weighted average lead samples and analyzing such samples through the use of OSHA Method 1006. If an owner or operator of a lead emission unit subject to this part elects to calculate lead emissions from an uncontrolled stack, such calculations must be completed at least once every five years.

Section 226.185 Recordkeeping and Reporting

- a) An owner or operator of a lead emission unit subject to this Part must keep and maintain all records used to demonstrate initial compliance and ongoing compliance with the requirements of this Part.
-
- 1) Except as otherwise provided under this Part, copies of such records must be submitted by the owner or operator of the source to the Illinois EPA within 30 days after receipt of a written request by the Illinois EPA.

- 2) The owner or operator must keep and maintain all records required by this Section at the source for at least five years from the date the document is created and must make all records available to the Illinois EPA for inspection and copying upon request.
- b) Notification of the initial startup of any new lead emission unit subject to this Part must be submitted to the Illinois EPA, directed to the Manager of the Bureau of Air's Compliance Section, no later than 30 days after initial startup.
 - c) The owner or operator of a lead emission unit subject to this Part must maintain records that demonstrate compliance with the requirements of this Part, as applicable, that include the following:
 - 1) Calendar date of the record.
 - 2) Reports for all applicable emissions tests for lead conducted on the lead emission unit, including the date of the test and the results.
 - 3) The date, time, and duration of any malfunction in the operation of any lead emission unit, any lead emission unit's control equipment, or any emissions monitoring equipment subject to this Part if such malfunction could cause an increase in emissions. The records must include a description of the malfunction, the probable cause of the malfunction, the date and nature of the corrective action taken, and any preventative action taken to avoid future malfunctions.
 - 4) A log of all inspections, cleanings, maintenance, and repair activities performed on a lead emission unit's control equipment. Said records must document the performance of the inspection, including the date of the inspection and the observed condition and operation of the control equipment. The records must also include the date and nature of the cleaning and the maintenance and repair activities performed on the lead emission unit's control equipment.
 - 5) Records including the date and nature of all pavement cleanings and any reason for not cleaning pavement (e.g., equipment breakdown).
 - 6) The date, time, and quantity of any spillage of dust containing lead. The records must include the date, time, and nature of the cleaning activity in response to the spill.
 - 7) A log of all battery storage inspection activities including the date of the inspection, a description of any broken batteries discovered during said inspections, and the date and nature of any required cleaning activities to control dust.

- 8) A log of all maintenance activities that could generate dust containing lead. The record must include the date of the maintenance activity, a description of the maintenance activity, and those measures implemented to minimize emissions of dust.
 - 9) A log of the hours of operation for all quenching operations.
 - d) The owner or operator of a lead emission unit subject to this Part must maintain records to demonstrate compliance with Section 226.150(a) and (b) of this Part.
 - e) The owner or operator of a lead emission unit subject to this Part must maintain the CDMP required by Section 226.150(c) of this Part. Records must be maintained demonstrating compliance with the CDMP.
 - f) The owner or operator of a lead emission unit subject to this Part must maintain records of changes in pressure that could indicate a leak or other problem and, if applicable, every alarm from the leak detection system. A log must be maintained of all investigations into the cause of such pressure changes and, if applicable, every alarm from the leak detection system, and any maintenance and repair activities performed as a result of such investigation. Said records must also include the date of each aforementioned activity. Records must be maintained in order to demonstrate compliance with Section 226.150(d) of this Part.
 - g) The owner or operator of a lead emission unit subject to this Part must maintain records demonstrating compliance with the lead fugitive dust operating program and with the activities required by Section 226.170 of this Part.
 - h) The owner or operator of a lead emission unit subject to this Part must maintain records that include the following information for each period when the affected emission unit operated without the lead emission unit's control equipment for lead and had the potential for emissions:
 - 1) The date, time, and duration of such outage.
 - 2) The length of time that the affected lead emission unit subject to this Part operated uncontrolled before required control measures were in place or the affected lead emission unit was shut down (to resume operations only after required control measures were in place) and an explanation why the time the affected lead emission unit operated uncontrolled was not shorter, including a description of any mitigation measures that were implemented.
-
- 3) A discussion of the probable cause of the outage of the control equipment.
 - 4) A discussion of the date and nature of any preventative measures taken to avoid future outage.

- i) The owner or operator of a lead emission unit subject to this Part must maintain records demonstrating compliance with Section 226.175 of the Part.
- j) The owner or operator of a lead emission unit subject to this Part must maintain a log of all inspections of control devices for the control of lead particulate. Such records must document the date of the inspection, the observed condition and operation of the control devices, and the date and nature of any corrective action taken. Records must be maintained demonstrating compliance with Sections 226.165(a) and (c) of this Part.
- k) The owner or operator of a lead emission unit subject to this Part must maintain a log of all inspections of any total enclosures and source structures. Such records must document the date of the inspection, the observed condition and operation of the total enclosure, and the date and nature of any corrective action taken. Records must be maintained demonstrating compliance with Sections 226.155(e), 226.160(a), and 226.165(b) and (c) of this Part.
- l) The owner or operator of a lead emission unit subject to this Part must maintain records that include any data or information necessary to demonstrate compliance with the CPMP including, but not limited to, records demonstrating compliance with Sections 226.155(c) and 226.160 of this Part.
- m) The owner or operator of a lead emission unit subject to this Part must notify the Illinois EPA, directed to the Manager of the Bureau of Air's Compliance Section, within five days after discovery of deviations from any of the requirements of this Part or any exceedance of an applicable emission limitation. At a minimum, and in addition to any permitting obligations, these notifications must include a description of such deviations, a discussion of the possible cause of such deviations, any corrective actions, and any preventative measures taken.
- n) The owner or operator of a lead emission unit subject to this Part must submit semiannual reports to the Illinois EPA, directed to the Manager of the Bureau of Air's Compliance Section. Such reports must include all monitoring reports summarizing monitoring as required by this Part, as well as summaries of all instances of deviations from the requirements of this Part. For the January through June monitoring period, the owner or operator shall submit the monitoring report by July 31 of that year. For the July through December monitoring period, the owner or operator shall submit the monitoring report by January 31 of the following year. All such reports must be certified by a responsible official that the information submitted is complete, true, and accurate.

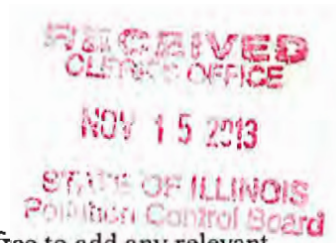
**Agency Analysis of Economic and
Budgetary Effects of Proposed Rulemaking**

Agency: Illinois Pollution Control Board

Part/Title: Standards and Limitations for Certain Sources of Lead
(35 Ill. Adm. Code Part 226)

Illinois Register Citation: _____

Please attempt to provide as dollar-specific responses as possible and feel free to add any relevant explanation.



1. Anticipated effect on State expenditures and revenues.

- (a) Current cost to the agency for this program/activity. ~\$0 per year
- (b) If this rulemaking will result in an increase or decrease in cost, specify the fiscal year in which this change will first occur and the dollar amount of the effect.
 N/A
- (c) Indicate the funding source, including Fund and appropriation lines, for this program/activity. N/A
- (d) If an increase or decrease in the costs of another State agency is anticipated, specify the fiscal year in which this change will first occur and the estimated dollar amount of the effect. N/A
- (e) Will this rulemaking have any effect on State revenues or expenditures not already indicated above? No

2. Economic effect on persons affected by the rulemaking:

- (a) Indicate the economic effect and specify the persons affected:

Positive ____ Negative X No effect ____

Persons affected: H. Kramer Brass and Bronze Foundry
Mayco Industries, LLC

Mayco Industries, LLC has provided an estimate that costs due to the proposed regulation would be approximately \$1.5 million.

Costs incurred by the H. Kramer Brass and Bronze Foundry for the purpose of addressing lead emissions can be attributed largely to the federal consent decree predating the rulemaking.

- (b) If an economic effect is predicted, please briefly describe how the effect will occur.

Economic effects will be due to changes at affected plants, and include changes to operations and pollution control equipment.

- (c) Will the rulemaking have an indirect effect that may result in increased administrative costs? Will there be any change in requirements such as filing, documentation, reporting or completion of forms?

Increases in administrative cost will be negligible.

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NOTICE OF PROPOSED AMENDMENTS

- 1) Heading of the Part: Standards and Limitations for Certain Sources of Lead
- 2) Code Citation: 35 Ill. Adm. Code 226
- 3)

<u>Section Numbers:</u>	<u>Proposed Action:</u>
226.100	New
226.105	New
226.110	New
226.115	New
226.120	New
226.125	New
226.130	New
226.140	New
226.150	New
226.155	New
226.160	New
226.165	New
226.170	New
226.175	New
226.185	New
- 4) Statutory Authority: Implementing and authorized by Sections 10, 27, 28.2 and 28.5 of the Environmental Protection Act [415 ILCS 5/10, 27, 28.2, and 28.5]
- 5) A Complete Description of the Subjects and Issues Involved: This rulemaking is proposed to meet certain obligations of the State of Illinois under the federal Clean Air Act, 42 U.S.C. § 7401 *et seq.*; specifically, to satisfy Illinois' obligation to submit a State Implementation Plan to address requirements of Section 172 of the Clean Air Act and 40 C.F.R. §51.117 for sources of lead emissions causing exceedances of the lead National Ambient Air Quality Standards (NAAQS). *See*, 42 U.S.C. §§ 7502. This proposal will require nonferrous metal production facilities located in areas of Illinois designated nonattainment for the 2008 lead NAAQS to achieve the numerical emission standards set by the proposed rule beginning January 1, 2015. Depending on the type of lead kettle or furnace being regulated at affected sources, the proposal sets forth an accompanying lead emission limit for the exhaust from the associated control device. In addition, the units that are the most significant sources of fugitive emissions at affected sources must operate within a total enclosure under negative pressure. Any gas stream exiting the enclosure must be controlled by particulate emission control equipment meeting an accompanying lead emission limit. Additional measures for reduction of fugitive

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NOTICE OF PROPOSED AMENDMENTS

emissions include operating pursuant to an Illinois EPA approved Lead Fugitive Dust Operating Program. This proposal also sets forth testing, monitoring, recordkeeping and reporting requirements for affected sources.

- 6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: The regulatory proposal relied on several sources. Copies of the documents the Illinois EPA relied upon are available for review with the Pollution Control Board and are listed below:

40 CFR 51, Appendix M, Method 204.

Gutow, B., *An Inventory of Iron Foundry Emissions*, Prepared for Air Pollution Control Office, Environmental Protection Agency, (Under Contract CPA 22-60-106), January 1972.

Illinois Environmental Protection Agency. Modeling Data for Part 226, Standards and Limitations for Certain Sources of Lead. Bureau of Air, Air Quality Planning Section, Springfield, IL, 2013.

Illinois Environmental Protection Agency. *Technical Support Document for Control of Lead Emissions from Nonferrous Metal Production Facilities in Lead Nonattainment Areas*, AQPSTR 13-07. Bureau of Air, Air Quality Planning Section, Springfield, IL, October 2013.

TRC Environmental Corporation. *Assessment of Fugitive Lead Emissions from the Electric Furnace Building, H. Kramer & Co., Chicago, Illinois*, June 26, 2012.

TRC Environmental Corporation. *Assessment of Fugitive Lead Emissions from the South Foundry Building, H. Kramer & Co., Chicago, Illinois*, June 2012.

U.S. Environmental Protection Agency. *Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources*, AP-42, Fifth Edition, Pages 12.17-1 – 12.17-4. January 1995.

U.S. Environmental Protection Agency, *Implementation of the 2008 Lead National Ambient Air Quality Standards, Guide to Developing Reasonably Available Control Measures (RACM) for Controlling Lead Emissions*, (EPA-457/R-12-001). March 2012.

United States of America and State of Illinois v. H. Kramer & Co., U.S. Dist. Ct.,

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NOTICE OF PROPOSED AMENDMENTS

Northern District, Civil Action No. 13 CV 0771, Consent Decree, December 24, 2012.

- 7) Will this proposed amendment replace an emergency rule currently in effect? No.
- 8) Does this rulemaking contain an automatic repeal date? No.
- 9) Does this proposed amendment contain incorporations by reference? Yes.
- 10) Are there any other proposed amendments pending on this Part? No.
- 11) Statement of Statewide Policy Objectives: This proposed rule does not create or enlarge a State mandate, as defined in Section 3(b) of the State Mandates Act. [30 ILCS 805/3(b) (2010)].
- 12) Time, Place, and Manner in which interested persons may comment on this proposed rulemaking:
- 13) Initial Regulatory Flexibility Analysis:
 - A. Types of small businesses, small municipalities and not for profit corporations affected: This rulemaking will impact any small business, small municipality, and not for profit corporation that falls within the definition of “nonferrous metal production facility” and meets the applicability requirements specified in the proposal.
 - B. Reporting, bookkeeping or other procedures required for compliance: The proposed rulemaking requires that the owner or operator of a subject source perform monitoring, complete required tests, and maintain records and make reports as required.
 - C. Types of Professional skills necessary for compliance: No professional skills beyond those currently required by the existing state and federal air pollution control regulations applicable to affected sources will be required.
- 14) Regulatory Agenda on which this rulemaking was summarized: July 2013

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POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

The full text of the Proposed Amendment(s) begins on the next page:

STATE OF ILLINOIS

COUNTY OF SANGAMON

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CERTIFICATE OF SERVICE

I, the undersigned, an attorney, state that I have served the attached RULEMAKING PROPOSAL entitled "STANDARDS AND LIMITATIONS FOR CERTAIN SOURCES OF LEAD: PROPOSED 35 ILL. ADM. CODE 226", MOTION FOR WAIVER OF COPY REQUIREMENTS, AND APPEARANCE upon the person to whom it is directed, by placing a copy in an envelope addressed to:

TO: James Therriault
Assistant Clerk
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph St., Suite 11-500
Chicago, IL 60601-3218
(Hand Delivery)

Office of Legal Counsel
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702
(First Class Mail)

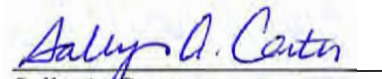
Mark A. Bilut
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