

## POLLUTION CONTROL BOARD

## NOTICE OF PROPOSED RULES

R 14-19

1) Heading of the Part: Standards and Limitations for Certain Sources of Lead

2) Code Citation: 35 Ill. Adm. Code 226

3) Section Numbers:                      Proposed Action:

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

**RECEIVED**  
DEC 06 2013  
STATE OF ILLINOIS  
Pollution Control Board

4) Statutory Authority: Implementing Section 10 of the Environmental Protection Act (Act) and authorized by Sections 27, 28.2, and 28.5 of the Act [415 ILCS 5/10, 27, 28.2, and 28.5]

5) A Complete Description of the Subjects and Issues Involved: A more complete description of this proposal may be found in the Board's first-notice opinion and order of November 21, 2013, in docket R14-19.

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 (2012); 40 C.F.R. § 51.117 (2013). 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

## POLLUTION CONTROL BOARD

## NOTICE OF PROPOSED RULES

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 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*

## POLLUTION CONTROL BOARD

## NOTICE OF PROPOSED RULES

*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, for Illinois Soils, Bulletin No. 811 (2000), revised 1/15/01 to amend Table S2 B811, University of Illinois College of Agriculture, Consumer and Environmental Sciences Office of Research

Illinois Environmental Protection Act (415 ILCS 5 (2012))

Clean Air Act (42 U.S.C. § 7401 *et seq.* (2012))

- 7) Will this rulemaking replace any emergency rule currently in effect? No
- 8) Do tthis rulemaking contain an automatic repeal date? No
- 9) Does this proposed rulemaking contain incorporations by reference? Yes

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

Air Quality Designations for the 2008 Lead (Pb) National Ambient Air Quality Standards, 75 Fed. Reg. 72097-01 (November 22, 2011).

Standards of Performance for New Stationary Sources, 40 C.F.R. § 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, 3A, 4, 12, and 29 (2012).

Hazardous Waste Management System: General, 40 C.F.R. §§ 260.11(c)(3)(v), 261, Method 1311 (2012).

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

OSHA Method 1006, Occupational Safety & Health Administration, January 2005.

- 10) Are there any other proposed rulemaking pending on this Part? No
- 11) Statement of Statewide Policy Objectives: These proposed amendments do not create or enlarge a State mandate as defined in Section 3(b) of the State Mandates Act.

## POLLUTION CONTROL BOARD

## NOTICE OF PROPOSED RULES

- 12) Time, Place, and Manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comment on this proposal for a period of 45 days after the date of publication. Comments should refer to docket R14-19 and be addressed to:

Clerk's Office  
Illinois Pollution Control Board  
100 W. Randolph St., Suite 11-500  
Chicago, IL 60601

Interested persons may request copies of the Board's opinion and order in R14-19 by calling the Clerk's office at 312/814-3620, or may download copies from the Board's Web site at [www.ipcb.state.il.us](http://www.ipcb.state.il.us). For more information, contact the Clerk's Office at 312/814-3629.

- 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: The Board does not expect that 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 in which these amendments were summarized: The Board's July 2013 regulatory agenda summarizes these proposed amendments at 37 Ill. Reg. 9060, (June 28, 2013).

The full text of the Proposed Rules begins on the next page:

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: Implementing Section 10 of the Environmental Protection Act and authorized by Sections 27, 28.2, and 28.5 of the Act [415 ILCS 5/10, 27, 28.2, and 28.5].

SOURCE: Adopted at 38 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

**Section 226.100 Severability**

If any Section, subsection, or clause of this Part is found invalid, that 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.

- 43           b)       Notwithstanding the provisions of this Part, the air quality standards contained in  
44                   35 Ill. Adm. Code 243 must not be violated.

45  
46 **Section 226.110 Abbreviations and Acronyms**

47  
48 The following abbreviations and acronyms are used in this Part:

49

50	Act	Illinois Environmental Protection Act, 415 ILCS 5
51	CPMP	continuous parametric monitoring plan
52	CDMP	control device monitoring plan
53	fpm	feet per minute
54	FV	facial velocity
55	gr/dscf	grains per dry standard cubic foot
56	Hg	mercury
57	Illinois EPA	Illinois Environmental Protection Agency
58	m/hr	meters per hour
59	mg/l	milligrams per liter
60	OSHA	Occupational Safety & Health Administration
61	Pb	lead
62	USEPA	United States Environmental Protection Agency

63

64 **Section 226.115 Definitions**

65  
66 The following definitions apply for the purposes of this Part. Unless otherwise defined in this  
67 Section or a different meaning for a term is clear from its context, all terms not defined in this  
68 Part shall have the meaning given them in the Act and in 35 Ill. Adm. Code 211.

69  
70           "Agglomerating furnace" means a furnace used to melt into a solid mass flue dust  
71           that is collected from a baghouse.

72  
73           "Alloy" means a mixture or metallic solid solution composed of 2 or more  
74           elements.

75  
76           "Alloying" means the process of combining or mixing metals or other substances  
77           in molten form for the purpose of producing a particular alloy.

78  
79           "Alloying and refining kettle" means an open-top vessel that is heated from below  
80           and contains molten lead for the purpose of alloying and refining the lead. These  
81           kettles include, but are not limited to, pot furnaces, receiving kettles, and holding  
82           kettles.

83  
84           "Battery breaking area" means the source location at which lead-acid batteries are  
85           broken, crushed, disassembled, or separated into components.

86  
87 "Casting" means the process of transferring molten lead-containing metal to a  
88 mold.  
89  
90 "Dross" means solid impurities removed from molten lead in lead kettles.  
91  
92 "Dryer" means a chamber that is heated and that is used to remove moisture from  
93 lead-bearing materials other than lead shot.  
94  
95 "Existing lead emission unit" means a lead emission unit in existence before  
96 January 1, 2015 at a nonferrous metal production facility.  
97  
98 "Housekeeping activities" means regular cleaning or maintenance activities  
99 conducted to reduce fugitive emissions from production areas.  
100  
101 "Induction furnace" means an electrical furnace used for heating metal by  
102 electromagnetic induction.  
103  
104 "Lead" means elemental lead or alloys in which the predominant component is  
105 lead (i.e., lead being more prevalent than any other single component).  
106  
107 "Lead-bearing scrap" or "lead-containing material" or "lead-containing metal" or  
108 "lead-containing wastes" or "lead particulate" means scrap or material or metal or  
109 wastes or particulate with a lead content equal to or greater than 5 mg/l as  
110 measured by EPA Method 1311, incorporated by reference in Section 226.120.  
111  
112 "Lead emission unit" means any process that emits lead, including, but not limited  
113 to, battery breaking areas; material handling areas; dryers and dryer areas; channel  
114 furnaces and channel furnace areas; coreless furnaces and coreless furnace areas;  
115 reverberatory furnaces and reverberatory furnace areas; rotary furnaces and rotary  
116 furnace areas; agglomerating furnaces and agglomerating furnace areas; kettles  
117 and casting areas; lead taps, slag taps, and molds during tapping; and areas where  
118 dust from fabric filters, sweepings, or used fabric filters are processed.  
119  
120 "Lead kettle" means a vessel that is heated from below and is used for the purpose  
121 of melting refined lead.  
122  
123 "Lead tap" means the pouring hole though which molten lead flows from a kettle  
124 or furnace.  
125  
126 "Leak detection system" means an instrument that is capable of monitoring  
127 relative particulate matter (dust) loadings in the exhaust of a particulate control in  
128 order to detect leaks in the particulate control. A leak detection system includes,

129 but is not limited to, an instrument that operates on triboelectric, light scattering,  
130 transmittance, or other effect to monitor relative particulate matter loadings.  
131

132 "Materials handling area" means any area in which lead-containing materials  
133 (including, but not limited to, broken battery components, flue dust, and dross) are  
134 handled in between process steps. These areas may include, but are not limited to,  
135 areas in which lead-bearing scrap, lead-containing materials, lead-containing  
136 metal, or lead-containing wastes are prepared.  
137

138 "Materials storage area" means any area in which lead-containing materials  
139 (including, but not limited to, broken battery components, flue dust, and dross) are  
140 stored in between process steps. These areas may include, but are not limited to,  
141 areas in which lead-bearing scrap, lead-containing materials, lead-containing  
142 metal, or lead-containing wastes are stored in open piles, bins, or tubs.  
143

144 "Mold cooling" means the process of cooling a mold containing hot metal by  
145 direct contact of the mold, but not the hot metal itself, with cooling water or other  
146 liquids.  
147

148 "Natural draft opening" means any permanent opening, including doors and  
149 windows, in a total enclosure that remains open during operation of the lead  
150 emissions unit in the enclosure or enclosures and is not connected to a duct in  
151 which a fan is installed.  
152

153 "New lead emission unit" means a lead emission unit constructed on or after  
154 January 1, 2015, at a nonferrous metal production facility.  
155

156 "Nonferrous metal" means a metal that is not an iron or steel alloy; these metals  
157 may include alloys of aluminum, copper, lead, and zinc.  
158

159 "Nonferrous metal production facility" means any source that is alloying, refining,  
160 or casting nonferrous metal or manufacturing nonferrous metal products, and  
161 where the source includes lead in their alloys or products by design.  
162

163 "Production area" means an indoor space at a nonferrous metal production facility  
164 where lead emission units are operated.  
165

166 "Quenching" means the process of cooling hot metal other than lead shot by direct  
167 contact of the metal with cooling water or other liquids.  
168

169 "Refined lead" means a material composed of lead alloys of a specified  
170 composition from an onsite or offsite lead refining operation.  
171



172 "Refining" means the process of removing impurities or oxides from a metal or  
173 metal alloy.

174  
175 "Reverberatory furnace" means a refractory-lined furnace that uses one or more  
176 flames to heat the walls and roof of the furnace and lead-bearing scrap to such a  
177 temperature that lead compounds are chemically reduced to elemental lead metal.  
178

179 "Rotary furnace" (also known as a rotary reverberatory furnace) means a furnace  
180 consisting of a refractory-lined chamber that rotates about a horizontal axis and  
181 that uses one or more flames to heat the walls of the furnace and lead-bearing  
182 scrap to such a temperature that lead compounds are chemically reduced to  
183 elemental lead metal.  
184

185 "Section Manager" means the Manager of Illinois EPA's Bureau of Air,  
186 Compliance Section.  
187

188 "Slag tap" means the pouring hole through which slag is removed from a kettle or  
189 furnace.  
190

191 "Tap" means the pouring hole through which molten metal flows from a kettle or  
192 furnace.  
193

194 "Tapping" means opening the tap.  
195

196 "Total enclosure" means a complete enclosure with walls and a roof designed to  
197 minimize exposure to the elements and to maximize containment of emissions  
198 from one or more lead emission units and that meets the following performance  
199 standards: the average facial velocity of air flowing into the enclosure through all  
200 natural draft openings during operation of lead emission units in each total  
201 enclosure in any one hour period must be at least 200 fpm (3,600 m/hr ) or  
202 average negative pressure value of 0.007 inches of water (0.013 mm Hg) must be  
203 maintained inside the enclosure over any one hour period.  
204

205 "Valid test run" means a completed test run conducted in accordance with a  
206 testing protocol submitted to the Illinois EPA, as required under Section  
207 226.175(f).  
208

209 **Section 226.120 Incorporations by Reference**  
210

211 The following materials are incorporated by reference. These incorporations do not include any  
212 later amendments or editions.  
213

- 214 a) 75 FR 71033-01, Air Quality Designations for the 2008 Lead (Pb) National  
215 Ambient Air Quality Standards (Monday, November 22, 2010).
- 216
- 217 b) 76 FR 72097-01, Air Quality Designations for the 2008 Lead (Pb) National  
218 Ambient Air Quality Standards (Tuesday, November 22, 2011).
- 219
- 220 c) 40 CFR 60, appendix A, Method 29 (2012).
- 221
- 222 d) 40 CFR 60, appendix A, Methods 1, 1A (2012).
- 223
- 224 e) 40 CFR 60, appendix A, Methods 2, 2A, 2C, and 2D (2012).
- 225
- 226 f) 40 CFR 60, appendix A, Methods 3, 3A (2012).
- 227
- 228 g) 40 CFR 60, appendix A, Method 4 (2012).
- 229
- 230 h) 40 CFR 60, appendix A, Method 12 (2012).
- 231
- 232 i) USEPA's Emission Measurement Center Guideline Document (GD-042),  
233 Preparation and Review of Site-Specific Emission Test Plans, Revised March  
234 1999.
- 235
- 236 j) 40 CFR 260.11(c)(3)(v) and 261, Method 1311 (2012).
- 237
- 238 k) OSHA. The following method from the Occupational Safety & Health  
239 Administration, Methods Development Team, Industrial Hygiene Chemistry  
240 Division, OSHA Salt Lake Technical Center, Sandy UT 84070-6406, (801) 233-  
241 4900: OSHA Method 1006 (approved January 2005).
- 242

243 **Section 226.125 Applicability**

244

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

- 248
- 249 a) Part of Madison County, specifically the area bounded by Granite City Township  
250 and Venice Township, 75 FR 71033-01 (November 22, 2010); and
- 251
- 252 b) Part of Cook County, specifically, the area bounded by Damen Avenue on the  
253 west, Roosevelt Road on the north, the Dan Ryan Expressway on the east, and the  
254 Stevenson Expressway on the south, 76 FR 72097-01 (November 22, 2011).
- 255

256 **Section 226.130 Compliance Date**

- 257
- 258 a) For an existing lead emission unit that is subject to this Part, compliance with
- 259 these requirements by an owner or operator of the unit is required by no later than
- 260 January 1, 2015.
- 261
- 262 b) For a new lead emission unit that is subject to this Part, compliance with these
- 263 requirements by an owner or operator of the unit is required by the date on which
- 264 the unit initially begins operation.
- 265

**Section 226.140 Lead Emission Standards**

- 266
- 267
- 268 a) For all alloying and refining kettles located at a source subject to this Part (see
- 269 Section 226.125), each lead emission unit must be:
- 270
- 271 1) Equipped with a capture system (including covers, hoods, ducts, and fans)
- 272 that is vented to a control device for lead particulates. The emissions of
- 273 lead into the atmosphere from each control device must not exceed 0.0010
- 274 gr/dscf; and
- 275
- 276 2) Operated in a total enclosure pursuant to Section 226.155. The entire gas
- 277 stream collected by each total enclosure must only be ducted to a control
- 278 device such that the emissions of lead into the atmosphere from each
- 279 control device must not exceed 0.00010 gr/dscf.
- 280
- 281 b) For reverberatory furnaces or rotary furnaces located at a source subject to this
- 282 Part (see Section 226.125), each lead emission unit must be:
- 283
- 284 1) Equipped with a capture system (including hoods, ducts, and fans) that is
- 285 vented to a control device for lead particulates. The emissions of lead into
- 286 the atmosphere from each control device must not exceed 0.00010 gr/dscf;
- 287 and
- 288
- 289 2) Operated in a total enclosure pursuant to Section 226.155. The entire gas
- 290 stream collected by each total enclosure must only be ducted to a control
- 291 device such that the emissions of lead into the atmosphere from each
- 292 control device must not exceed 0.00010 gr/dscf.
- 293
- 294 c) Notwithstanding the provisions for total enclosure in subsections (a) and (b), any
- 295 emissions of lead exiting an uncontrolled stack during quenching or mold cooling
- 296 operations must not exceed 0.00010 gr/dscf. Quenching operations shall be
- 297 limited to no more than 6 hours per associated unit in any 24 hour period.
- 298

- 299 d) For induction furnaces located at a source subject to this Part (see Section  
300 226.125), each lead emission unit must be equipped with a capture system  
301 (including hoods, ducts, and fans) that is vented to a control device for lead  
302 particulates. The emissions of lead into the atmosphere from each control device  
303 must not exceed 0.000010 gr/dscf.  
304
- 305 e) For all other furnaces, lead kettles, or any other operation subject to this Part (see  
306 Section 226.125), but not subject to subsection (a), (b), or (d), each lead emission  
307 unit must be equipped with a capture system (including ducts, fans, and hoods or  
308 covers) that is vented to a control device for lead particulates. The emissions of  
309 lead into the atmosphere from each control device must not exceed 0.00010  
310 gr/dscf.  
311
- 312 f) Any source subject to the requirements of this Part (see Section 226.125) must  
313 operate pursuant to a lifetime operating permit, a federally enforceable State  
314 operating permit, a Clean Air Act Permit Program permit, or conditions within a  
315 construction permit.  
316

317 **Section 226.150 Operational Monitoring for Control Device**  
318

- 319 a) The owner or operator of a lead emission unit subject to this Part must install,  
320 maintain, and operate parametric monitoring equipment that consists of a pressure  
321 differential system to measure the pressure drop across each control device  
322 required by Section 226.140. Data from this instrumentation must be recorded as  
323 follows:  
324
  - 325 1) Data must be automatically recorded every minute during operation of any  
326 lead emission unit subject to Section 226.140(a) or (b).  
327
  - 328 2) Data must be recorded at least once every 8 hours during operation of any  
329 lead emission unit subject to Section 226.140(d) or (e).  
330
  - 331 3) If the control device used to control lead emission units subject to Section  
332 226.140(a) or (b) is the same as the control device used to control other  
333 lead emission units subject to Section 226.140(d) or (e), the requirements  
334 in subsection (a)(1) apply to the control device.  
335
- 336 b) The owner or operator of a lead emission unit subject to this Part and using a  
337 baghouse or other filter system to control units subject to the total enclosure  
338 requirements of Section 226.155 must install, maintain, and operate parametric  
339 monitoring equipment that consists of a leak detection system. The leak detection  
340 system must be installed at the outlet of the baghouse or other filter system.  
341

- 342 c) The owner or operator of a lead emission unit subject to this Part must develop  
 343 and maintain a Control Device Monitoring Plan. The CDMP must be submitted  
 344 for review and approval to the Illinois EPA, directed to the Manager of the  
 345 Bureau of Air's Compliance Section by the compliance date specified in Section  
 346 226.130 and within 30 days after any changes are made to the plan. The CDMP  
 347 must be amended by the owner or operator of a lead emission unit subject to this  
 348 Part as necessary to ensure that it is kept current.
- 349
- 350 d) The CDMP must include procedures to investigate and determine the cause of  
 351 changes in pressure that could indicate a leak or other problem and, if applicable,  
 352 every alarm from the leak detection system. The procedures must also include a  
 353 means to determine appropriate corrective actions and preventative measures to  
 354 address the pressure changes and to avoid future alarms. The owner or operator  
 355 of a lead emission unit subject to this Part must operate and maintain each  
 356 pressure differential system and each leak detection system according to the  
 357 CDMP at all times.
- 358

359 **Section 226.155 Total Enclosure**

- 360
- 361 a) An owner or operator of a lead emission unit subject to this Part must install,  
 362 maintain, and operate one or more total enclosures to minimize fugitive emissions  
 363 from the operations listed in subsections (a)(1) through (6) at all times that the  
 364 applicable lead emission unit in the total enclosure is operating or housekeeping  
 365 activities are being performed. The total enclosure must meet the requirements  
 366 specified in subsections (b) through (e).
- 367
- 368 1) Battery breaking areas.
  - 369
  - 370 2) Dryer and dryer areas, including transition pieces, charging hoppers,  
 371 chutes, and skip hoists conveying any lead-containing material.
  - 372
  - 373 3) Reverberatory furnaces or rotary furnaces charging any lead-containing  
 374 material and the associated reverberatory furnace areas or rotary furnace  
 375 areas, including any associated lead taps, slag taps, and molds during  
 376 processing.
  - 377
  - 378 4) Alloying and refining kettles and associated areas, including any  
 379 associated lead taps, slag taps, and molds during processing.
  - 380
  - 381 5) Areas where dross, dust from fabric filters, sweepings, or used fabric  
 382 filters are handled, except for areas where all such materials are in closed,  
 383 leak-proof containers at all times.
  - 384

- 385  
386  
387  
388  
389  
390  
391  
392  
393  
394  
395  
396  
397  
398  
399  
400  
401  
402
- 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 also contain operations listed in subsections (a)(1) through (5):
    - 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; or
    - 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) during all sorting and handling activities and if the scrap is stored in closed containers at all other times.
- 403  
404  
405  
406
- 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.
- 407  
408  
409  
410  
411  
412  
413  
414  
415
- 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) in the total enclosure is operating. 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.
- 416  
417  
418  
419  
420  
421  
422
- d) The total enclosure required by subsection (a) 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 or enclosures 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).
- 423  
424  
425  
426  
427
- 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 those 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.

428 **Section 226.160 Operational Measurement for Total Enclosure**

- 429
- 430 a) An owner or operator of a lead emission unit subject to the total enclosure
- 431 requirement of Section 226.155 must measure the total area of all natural draft
- 432 openings and the total surface area of the total enclosure.
- 433
- 434 b) An owner or operator of a lead emission unit subject to the total enclosure
- 435 requirement of Section 226.155 must measure the facial velocity of air flowing
- 436 through all natural draft openings using the following equation while any lead
- 437 emission unit applicable to the operation listed in Section 226.155(a) is operating.
- 438 Values for  $Q_0$  and  $Q_I$  must be obtained by means of testing pursuant to subsection
- 439 (b)(1) or monitoring pursuant to subsection (b)(2):
- 440

441 
$$FV = \frac{Q_0 - Q_I}{A_n}$$

442 Where:

443  $Q_0$  = the sum of volumetric flow from all gas streams exiting the total

444 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.

- 445
- 446 1) An owner or operator of a lead emission unit subject to the total enclosure
- 447 requirement of Section 226.155 must conduct testing to determine the
- 448 values for  $Q_0$  and  $Q_I$  at the same time as any emissions testing is
- 449 conducted pursuant to Section 226.175; or
- 450
- 451 2) An owner or operator of a lead emission unit subject to the total enclosure
- 452 requirement of Section 226.155 must install, maintain, and operate a flow
- 453 monitor at the outlet of each control device required by Section 226.140 to
- 454 measure the volumetric flow from all gas streams exiting the total
- 455 enclosure through the control device (or the final control device emitting
- 456 to the atmosphere if the source has more than one control device in series).
- 457 This volumetric flow data must be monitored and automatically recorded
- 458 every minute.
- 459
- 460 c) As an alternative to compliance with the requirements of subsection (b), an owner
- 461 or operator of a lead emission unit subject to the total enclosure requirement of
- 462 Section 226.155 must install, operate, and maintain instrumentation to monitor the

463 pressure differential between the interior and exterior of the enclosure, measured  
 464 in inches of water, to demonstrate compliance with the differential pressure  
 465 requirements in Section 226.155(c). This instrumentation must be located and  
 466 designed to operate in accordance with all of the requirements of subsections  
 467 (c)(1) through (6) of this Section:  
 468

- 469 1) An owner or operator of a total enclosure that has a total ground surface  
 470 area of 10,000 square feet or more must install and maintain a minimum of  
 471 one building digital differential pressure monitoring system at each of the  
 472 following 3 walls in each total enclosure:  
 473
  - 474 A) The leeward wall.
  - 475 B) The windward wall.
  - 476 C) An exterior wall that connects the leeward and windward wall at a  
 477 location defined by the intersection of a perpendicular line between  
 478 a point on the connecting wall and a point on its furthest opposite  
 479 exterior wall, and intersecting within plus or minus 10 meters of  
 480 the midpoint of a straight line between the 2 other monitors  
 481 specified. The midpoint monitor must not be located on the same  
 482 wall as either of the other 2 monitors.  
 483
- 484 2) An owner or operator of a total enclosure that has a total ground surface  
 485 area of less than 10,000 square feet must install and maintain a minimum  
 486 of one building digital differential pressure monitoring system at the  
 487 leeward wall of each total enclosure.  
 488
- 489 3) Each digital differential pressure monitoring system must be certified by  
 490 the manufacturer to be capable of measuring and displaying negative  
 491 pressure in the range of 0.001 to 0.11 inches of water (0.002 to 0.2 mm  
 492 Hg) with a minimum accuracy of plus or minus 0.001 inches of water  
 493 (0.002 mm Hg).  
 494
- 495 4) Each digital differential pressure monitoring system must be equipped  
 496 with a continuous recorder.  
 497
- 498 5) Each digital differential pressure monitoring system must be calibrated in  
 499 accordance with manufacturer's specifications at least once every 12  
 500 calendar months or more frequently if recommended by the manufacturer.  
 501  
 502  
 503



- 504  
505  
506  
507  
508  
509  
510  
511  
512  
513  
514  
515  
516  
517  
518  
519  
520  
521  
522  
523  
524  
525  
526  
527  
528  
529  
530  
531  
532  
533  
534  
535  
536  
537  
538  
539  
540  
541  
542  
543  
544  
545  
546
- 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 must develop and maintain a Continuous Parametric Monitoring Plan containing the information required in subsection (d)(1), (2), or (3). The CPMP must be submitted for review and approval to the Section Manager by the compliance date specified in Section 226.130 and within 30 days after any changes are made to the 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) using the total enclosure measurement method in subsection (b)(1), the CPMP must contain the information required by subsections (d)(1)(A) through (D).
      - 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 those 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) that demonstrate compliance with the facial velocity requirements in Section 226.155(c). 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), 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). This information must include, but is not limited to, all information to be submitted as part of the

547 semiannual reports required by Section 226.185(n), as well as the  
548 reporting frequency.  
549

- 550 2) If electing to comply with the facial velocity requirement in Section  
551 226.155(c) using the total enclosure monitoring method in subsection  
552 (b)(2), the CPMP must contain the information required by subsections  
553 (d)(2)(A) through (C).  
554
- 555 A) The CPMP must specify limits or ranges of values of the sum of  
556 volumetric flow from all gas streams exiting the total enclosure  
557 through the control device and the sum of the volumetric flow  
558 from all gas streams into the total enclosure through a forced  
559 makeup air duct. These limits or ranges must represent the  
560 conditions indicative of proper operation and maintenance of the  
561 facial velocity through all natural draft openings during operation  
562 of lead emission units in each total enclosure.  
563
  - 564 B) The CPMP must specify data to be recorded to demonstrate  
565 compliance with the facial velocity requirements in Section  
566 226.155(c), as well as the recording frequency and methodology.  
567
  - 568 C) The CPMP must specify the information to be reported to the  
569 Illinois EPA to demonstrate compliance with the facial velocity  
570 requirements in Section 226.155(c). This information must include,  
571 but is not limited to, all information to be submitted as part of the  
572 semiannual reports required by Section 226.185(n), as well as the  
573 reporting frequency.  
574
- 575 3) If electing to comply with the average differential pressure requirement in  
576 Section 226.155(c) using the total enclosure measurement method in  
577 subsection (c), the CPMP must contain the information required by  
578 subsections (d)(3)(A) through (C).  
579
- 580 A) The CPMP must identify the locations and design of each  
581 differential pressure monitoring instrumentation demonstrating  
582 compliance with the requirements of subsection (c) to ensure that  
583 the average differential pressure is measured properly, explain why  
584 those locations are appropriate for demonstrating ongoing  
585 compliance, and provide a schedule for instrumentation  
586 calibration.  
587
  - 588 B) The CPMP must specify data to be recorded to demonstrate  
589 compliance with the average differential pressure requirements in

590 Section 226.155(c), as well as the recording frequency and  
591 methodology.

592  
593 C) The CPMP must specify the information to be reported to the  
594 Illinois EPA to demonstrate compliance with the average  
595 differential pressure requirements in Section 226.155(c). This  
596 information must include, but is not limited to, all information to  
597 be submitted as part of the semiannual reports required by Section  
598 226.185(n), as well as the reporting frequency.

599  
600 e) The owner or operator of a lead emission unit subject to this Part electing to  
601 change the total enclosure measurement method for an existing lead emission unit  
602 subject to the total enclosure requirements of Section 226.155 must notify the  
603 Section Manager of the measurement method by which the owner or operator will  
604 comply with the requirements of this Section. The notification must include an  
605 updated CPMP complying with the appropriate requirements for the new  
606 measurement method and must occur at least 30 days prior to changing the  
607 method.  
608

609 **Section 226.165 Inspection**

610  
611 a) An owner or operator of a lead emission unit subject to this Part must inspect  
612 control devices for the control of lead particulate at least once per month. The  
613 inspections of control devices must include all structures that comprise the  
614 infrastructure of the affected control device and other structures that are necessary  
615 for the affected control device to function in its intended capacity.

616  
617 b) An owner or operator of a lead emission unit subject to this Part must inspect all  
618 total enclosures for proper operation and physical integrity at least once per  
619 month.

620  
621 c) An owner or operator of a lead emission unit subject to this Part must maintain  
622 and repair any control device and total enclosure, including all structures that  
623 comprise the infrastructure of the affected control device and total enclosure, as  
624 necessary to ensure proper and compliant operation.  
625

626 **Section 226.170 Lead Fugitive Dust Operating Program**

627  
628 a) An owner or operator of a lead emission unit subject to this Part must operate at  
629 all times according to a lead fugitive dust operating program that describes in  
630 detail the measures that are implemented to minimize lead fugitive dust emissions  
631 from the areas, activities, or events listed in subsections (a)(1) through (7):  
632

- 633  
634  
635  
636  
637  
638  
639  
640  
641  
642  
643  
644  
645  
646  
647  
648  
649  
650  
651  
652  
653  
654  
655  
656  
657  
658  
659  
660  
661  
662  
663  
664  
665  
666  
667  
668  
669  
670  
671  
672  
673  
674  
675
- 1) Source roadways;
  - 2) Source buildings housing lead emission units;
  - 3) Battery storage areas;
  - 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).
- 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 Section Manager by the compliance date specified in Section 226.130 and within 30 days after any changes are made to the program. 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).
- 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 following frequencies:
    - 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

676 in any total enclosure required by Section 226.155 for all  
677 production areas.

- 678  
679 B) Cleanings of scrap sorting and handling areas subject to Section  
680 226.155(a)(6)(D) must be performed directly after sorting or  
681 handling is completed and before shutdown of the required capture  
682 and control equipment.
- 683  
684 C) Cleanings must be performed at least once every 7 calendar days  
685 for all areas where lead-containing wastes generated from  
686 housekeeping activities are stored, disposed of, recovered, or  
687 recycled.
- 688  
689 D) Cleanings of all areas must be performed no later than one hour  
690 after detection of any accidental release of dust containing lead.

- 691  
692 3) All areas within the property boundaries subject to vehicle traffic must be  
693 paved and must be cleaned at least once every 7 calendar days to remove  
694 dust or other accumulated material from paved areas within the property  
695 boundaries. The cleaning must be performed using a vacuum truck with a  
696 filter rated by the manufacturer to achieve at least 99.97 percent capture  
697 efficiency for 0.3 micron particles, or a wet sweeper, or a combination  
698 thereof. Limited access and limited use roadways such as unpaved roads  
699 to remote locations on the property are exempt from this requirement if  
700 they are used infrequently (no more than one round trip per day).
- 701  
702 4) Broken batteries must only be stored in a total enclosure. Any battery  
703 storage areas that are not located in a total enclosure must be inspected at  
704 least once every 7 calendar days. Within 72 hours after identification, any  
705 broken batteries must be moved to a total enclosure and all residue from  
706 broken batteries must be collected and the area must be cleaned.
- 707  
708 5) All maintenance activities that could generate dust containing lead must be  
709 performed in a manner that minimizes emissions of dust, including, but  
710 not limited to, the use of a vacuum cleaner equipped with a filter rated by  
711 the manufacturer to achieve at least 99.97 percent capture efficiency for  
712 0.3 micron particles or the use of wet suppression sufficient to prevent  
713 dust formation.
- 714  
715 6) All collected dross and dust must be stored and transported within closed  
716 conveyor and storage systems or in closed, leak-proof containers. All  
717 other lead-containing material must be contained and covered for transport  
718 outside of a total enclosure in a manner that minimizes spillage or dust

719 formation. The transport outside of a total enclosure of scrap metal, spent  
720 refractory brick, ladles, and finished product must be addressed in the lead  
721 fugitive dust operating program so as to minimize the spillage of lead-  
722 containing material or the formation of dust.

- 723
- 724 7) Replacement of control equipment filter bags must be conducted in the  
725 manner specified in this subsection (c)(7). All vacuuming referenced in  
726 this subsection (c)(7) must be performed by a vacuum cleaner equipped  
727 with a filter rated by the manufacturer to achieve at least 99.97 percent  
728 capture efficiency for 0.3 micron particles:
- 729
- 730 A) Used filter bags must be rolled-up and placed into sealed plastic  
731 bags or barrels prior to removal from the filter unit;
- 732
- 733 B) The filter unit floors, the dirty and clean plenum side, must be  
734 vacuumed of dust residues immediately following removal  
735 activity;
- 736
- 737 C) The ground surface in and around the filter unit must be vacuumed  
738 immediately following the complete installation of new filter bags  
739 to remove any and all dust residue; and
- 740
- 741 D) In those instances in which filter bag replacement requires more  
742 than one operational day, the requirements of subsection (c)(7)(C)  
743 must be completed just prior to the end of each operational day.
- 744
- 745 8) Measures, including, but not limited to, those specified in subsections  
746 (c)(1) through (7) must be implemented to minimize the tracking of dust  
747 containing lead out of the total enclosure by personnel or by equipment  
748 used in handling the material.
- 749
- 750 d) All grounds on any source subject to this Part must be paved or oiled, or have  
751 sufficient groundcover planted, to minimize the amount of wind-blown dust  
752 leaving the property.
- 753
- 754 e) The applicability of this Part to the owner or operator of a lead emission unit does  
755 not exempt the owner or operator from compliance with the applicable  
756 requirements in 35 Ill. Adm. Code 212.
- 757

758 **Section 226.175 Emissions Testing**

759

- 760 a) For an existing lead emission unit that is subject to this Part, testing of lead  
761 emissions at control devices required by Section 226.140 must be conducted by  
762 January 1, 2015.  
763
- 764 b) Retesting  
765
- 766 1) The owner or operator of an existing lead emission unit that is subject to  
767 this Part and that performed all testing necessary to demonstrate  
768 compliance with Section 226.140 prior to January 1, 2015 is not required  
769 to retest pursuant to subsection (a) if:  
770
- 771 A) On or after January 1, 2011, the owner or operator of an existing  
772 lead emission unit that is subject to this Part performed all testing  
773 necessary to demonstrate compliance with Section 226.140;  
774
- 775 B) The owner or operator submitted the results of the tests to the  
776 Illinois EPA, and the tests were not rejected by the Illinois EPA;  
777
- 778 C) The same capture system and control device or devices tested  
779 under subsection (b)(1)(A) are still being used by the subject lead  
780 emission unit; and  
781
- 782 D) The owner or operator complies with all recordkeeping and  
783 reporting requirements in Section 226.185(i).  
784
- 785 2) Nothing in this subsection (b), however, shall limit the ability of the  
786 Illinois EPA or the USEPA to require that the owner or operator perform  
787 testing pursuant to subsection (e).  
788
- 789 c) For a new lead emission unit that is subject to this Part, testing of lead emissions  
790 at control devices required by Section 226.140 must be conducted within 60 days  
791 after achieving maximum operating rate, but no later than 180 days after initial  
792 startup of the new lead emission unit in accordance with this Section.  
793
- 794 d) The owner or operator of a lead emission unit subject to this Part must have  
795 subsequent emissions tests conducted at least once every 5 years. The owner or  
796 operator of a lead emission unit that tested prior to January 1, 2015, in accordance  
797 with subsection (b) must use the original test date as the beginning of this 5-year  
798 period.  
799
- 800 e) When, as determined by the Illinois EPA or USEPA, it is necessary to conduct  
801 testing to demonstrate compliance with Section 226.140, the owner or operator of  
802 a lead emission unit subject to this Part must, at his or her own expense, have the

- 803 test conducted in accordance with the applicable test methods and procedures  
 804 specified in this Section within 90 days after receipt of a notice to test from the  
 805 Illinois EPA or USEPA, unless that notice specifies an alternative testing  
 806 deadline.
- 807
- 808 f) The owner or operator of a lead emission unit subject to the emissions testing  
 809 requirements of this Section must conduct all that tests for lead pursuant to  
 810 subsections (g) through (m).  
 811
- 812 g) The owner or operator of a lead emission unit required to test pursuant to  
 813 subsection (a), (c), (d), or (e) must submit a testing protocol as described in  
 814 USEPA's Emission Measurement Center Guideline Document (GD-042) to the  
 815 Illinois EPA, directed to the Manager of the Bureau of Air's Compliance Section,  
 816 at least 45 days prior to a scheduled emissions test. Upon written request directed  
 817 to the Section Manager, the Illinois EPA may, in its sole discretion, waive the 45-  
 818 day requirement. A waiver is only effective if it is provided in writing by the  
 819 Section Manager or his or her designee.  
 820
- 821 h) Notification of a scheduled emissions test must be submitted to the Illinois EPA  
 822 in writing, directed to the Section Manager, at least 30 days prior to the expected  
 823 date of the emissions test and, again, 5 days prior to the testing. Upon written  
 824 request directed to the Section Manager, the Illinois EPA may, in its sole  
 825 discretion, waive the 30-day requirement or the 5-day requirement. A waiver is  
 826 only effective if it is provided in writing by the Section Manager or his or her  
 827 designee.  
 828
- 829 i) If, after the 30-days' notice for an initially scheduled test is sent, there is a delay  
 830 (e.g., due to operational problems) in conducting the test as scheduled, the owner  
 831 or operator of the lead emission unit must notify the Compliance Section as soon  
 832 as practicable of the delay in the original test date, either by providing at least 7  
 833 days' notice of the rescheduled date of the test or by arranging a new test date  
 834 with the Illinois EPA by mutual agreement.  
 835
- 836 j) Not later than 60 days after the completion of the test, the owner or operator of a  
 837 lead emission unit required to test pursuant to subsection (a), (c), (d), or (e) must  
 838 submit the results of the test to the Illinois EPA, directed to the Section Manager.  
 839
- 840 k) The owner or operator of a lead emission unit subject to the emissions testing  
 841 requirements of this Section must conduct tests for lead emissions using 40 CFR  
 842 60, subpart A, and appendix A, Methods 1 (1 or 1A), 2 (2, 2A, 2C, or 2D), 3 (3 or  
 843 3A), and 4, and Method 12 or 29, as incorporated by reference in Section  
 844 226.120, or other alternative USEPA methods approved by the Illinois EPA.  
 845



- 846           1)     Each emissions test must be in accordance with all of the following requirements:  
847  
848                 1)     Method 12 or 29 must be used to determine compliance with the lead  
849                         emission standard in Section 226.140;  
850  
851                 2)     The minimum sample volume must be 0.85 dry standard cubic meters (30  
852                         dry standard cubic feet);  
853  
854                 3)     The minimum sampling time must be 60 minutes for each run. Consistent  
855                         with the averaging and compliance requirements of this subsection (l), at  
856                         least 3 runs must be performed and the arithmetic average of 3 valid runs  
857                         must be used to determine compliance;  
858  
859                 4)     The following procedure must be used to average emissions of tests results  
860                         for any compliance determination:  
861  
862                         A)     The average of the emissions test results must be determined by  
863                                 the arithmetic average of 3 valid test run results, as long as the test  
864                                 runs are conducted in conformance with the provisions of an  
865                                 approved testing protocol as required by subsection (g).  
866  
867                         B)     Notwithstanding subsection (l)(4)(A), if the owner or operator of a  
868                                 lead emission unit elects to perform more than 3 test runs, then the  
869                                 average must be calculated based upon the results of all valid test  
870                                 runs.  
871  
872                         C)     Notwithstanding subsection (l)(4)(A), in the event that a sample is  
873                                 accidentally lost or conditions occur in which one of the test runs  
874                                 must be discontinued because of forced shutdown, failure of an  
875                                 irreplaceable portion of the sample train, extreme meteorological  
876                                 conditions, malfunction, or other dissimilar or non-representative  
877                                 circumstances, upon the owner's or operator's documentation of the  
878                                 existence of any of the circumstances set forth in this subsection  
879                                 (l)(4)(C) and verification by the Section Manager or his designee  
880                                 that the conditions existed, compliance may be determined by  
881                                 using the arithmetic average of the test results of all remaining  
882                                 valid test runs; however, a minimum of 2 valid test runs is required  
883                                 to determine compliance;  
884  
885                 5)     Each test for lead emissions must be conducted during conditions  
886                         representative of maximum lead emissions; and  
887

888 6) If an owner or operator of a lead emission unit does not meet the criteria  
 889 for averaging of subsection (1)(4), then each individual valid test run must  
 890 meet the applicable limitation in order to demonstrate compliance.  
 891

892 m) The owner or operator of any lead emission unit for which emissions are vented  
 893 from an uncontrolled stack to the atmosphere must test those emissions in  
 894 accordance with the requirements of this Section or calculate the emissions by  
 895 means of collecting area time-weighted average lead samples and analyzing those  
 896 samples through the use of OSHA Method 1006. If an owner or operator of a  
 897 lead emission unit subject to this Part elects to calculate lead emissions from an  
 898 uncontrolled stack, the calculations must be completed at least once every 5 years.  
 899

900 **Section 226.185 Recordkeeping and Reporting**  
 901

902 a) An owner or operator of a lead emission unit subject to this Part must keep and  
 903 maintain all records used to demonstrate initial compliance and ongoing  
 904 compliance with the requirements of this Part.  
 905

906 1) Except as otherwise provided under this Part, copies of the records must  
 907 be submitted by the owner or operator of the source to the Illinois EPA  
 908 within 30 days after receipt of a written request by the Illinois EPA.  
 909

910 2) The owner or operator must keep and maintain all records required by this  
 911 Section at the source for at least 5 years from the date the document is  
 912 created and must make all records available to the Illinois EPA for  
 913 inspection and copying upon request.  
 914

915 b) Notification of the initial startup of any new lead emission unit subject to this Part  
 916 must be submitted to the Section Manager no later than 30 days after initial  
 917 startup.  
 918

919 c) The owner or operator of a lead emission unit subject to this Part must maintain  
 920 records that demonstrate compliance with the requirements of this Part, as  
 921 applicable, that include the following:  
 922

923 1) Calendar date of the record;  
 924

925 2) Reports for all applicable emissions tests for lead conducted on the lead  
 926 emission unit, including the date of the test and the results;  
 927

928 3) The date, time, and duration of any malfunction in the operation of any  
 929 lead emission unit, any lead emission unit's control equipment, or any  
 930 emissions monitoring equipment subject to this Part if the malfunction

- 931 could cause an increase in emissions. The records must include a  
932 description of the malfunction, the probable cause of the malfunction, the  
933 date and nature of the corrective action taken, and any preventative action  
934 taken to avoid future malfunctions;  
935
- 936 4) A log of all inspections, cleanings, maintenance, and repair activities  
937 performed on a lead emission unit's control equipment. The records must  
938 document the performance of the inspection, including the date of the  
939 inspection and the observed condition and operation of the control  
940 equipment. The records must also include the date and nature of the  
941 cleaning and the maintenance and repair activities performed on the lead  
942 emission unit's control equipment;  
943
- 944 5) Records, including the date and nature of all pavement cleanings, and any  
945 reason for not cleaning pavement (e.g., equipment breakdown);  
946
- 947 6) The date, time, and quantity of any spillage of dust containing lead. The  
948 records must include the date, time, and nature of the cleaning activity in  
949 response to the spill;  
950
- 951 7) A log of all battery storage inspection activities, including the date of the  
952 inspection, a description of any broken batteries discovered during the  
953 inspections, and the date and nature of any required cleaning activities to  
954 control dust;  
955
- 956 8) A log of all maintenance activities that could generate dust containing  
957 lead. The record must include the date of the maintenance activity, a  
958 description of the maintenance activity, and those measures implemented  
959 to minimize emissions of dust; and  
960
- 961 9) A log of the hours of operation for all quenching operations.  
962
- 963 d) The owner or operator of a lead emission unit subject to this Part must maintain  
964 records to demonstrate compliance with Section 226.150(a) and (b).  
965
- 966 e) The owner or operator of a lead emission unit subject to this Part must maintain  
967 the CDMP required by Section 226.150(c). Records must be maintained  
968 demonstrating compliance with the CDMP.  
969
- 970 f) The owner or operator of a lead emission unit subject to this Part must maintain  
971 records of changes in pressure that could indicate a leak or other problem and, if  
972 applicable, every alarm from the leak detection system. A log must be maintained  
973 of all investigations into the cause of the pressure changes and, if applicable,

- 974 every alarm from the leak detection system, and any maintenance and repair  
 975 activities performed as a result of the investigation. The records must also include  
 976 the date of each aforementioned activity. Records must be maintained in order to  
 977 demonstrate compliance with Section 226.150(d).  
 978
- 979 g) The owner or operator of a lead emission unit subject to this Part must maintain  
 980 records demonstrating compliance with the lead fugitive dust operating program  
 981 and with the activities required by Section 226.170.  
 982
- 983 h) The owner or operator of a lead emission unit subject to this Part must maintain  
 984 records that include the following information for each period when the affected  
 985 emission unit operated without the lead emission unit's control equipment for lead  
 986 and had the potential for emissions:  
 987
- 988 1) The date, time, and duration of the outage;
  - 989
  - 990 2) The length of time that the affected lead emission unit subject to this Part  
 991 operated uncontrolled before required control measures were in place or  
 992 the affected lead emission unit was shut down (to resume operations only  
 993 after required control measures were in place) and an explanation why the  
 994 time the affected lead emission unit operated uncontrolled was not shorter,  
 995 including a description of any mitigation measures that were implemented;  
 996
  - 997 3) A discussion of the probable cause of the outage of the control equipment;  
 998 and  
 999
  - 1000 4) A discussion of the date and nature of any preventative measures taken to  
 1001 avoid future outage.  
 1002
- 1003 i) The owner or operator of a lead emission unit subject to this Part must maintain  
 1004 records demonstrating compliance with Section 226.175.  
 1005
- 1006 j) The owner or operator of a lead emission unit subject to this Part must maintain a  
 1007 log of all inspections of control devices for the control of lead particulate. The  
 1008 records must document the date of the inspection, the observed condition and  
 1009 operation of the control devices, and the date and nature of any corrective action  
 1010 taken. Records must be maintained demonstrating compliance with Sections  
 1011 226.165(a) and (c).  
 1012
- 1013 k) The owner or operator of a lead emission unit subject to this Part must maintain a  
 1014 log of all inspections of any total enclosures and source structures. The records  
 1015 must document the date of the inspection, the observed condition and operation of  
 1016 the total enclosure, and the date and nature of any corrective action taken.

- 1017 Records must be maintained demonstrating compliance with Sections 226.155(e),  
1018 226.160(a), and 226.165(b) and (c).  
1019
- 1020 l) The owner or operator of a lead emission unit subject to this Part must maintain  
1021 records that include any data or information necessary to demonstrate compliance  
1022 with the CPMP, including, but not limited to, records demonstrating compliance  
1023 with Sections 226.155(c) and 226.160.  
1024
- 1025 m) The owner or operator of a lead emission unit subject to this Part must notify the  
1026 Section Manager within 5 days after discovery of deviations from any of the  
1027 requirements of this Part or any exceedance of an applicable emission limitation.  
1028 At a minimum, and in addition to any permitting obligations, these notifications  
1029 must include a description of the deviations, a discussion of the possible cause of  
1030 the deviations, any corrective actions, and any preventative measures taken.  
1031
- 1032 n) The owner or operator of a lead emission unit subject to this Part must submit  
1033 semiannual reports to the Section Manager. The reports must include all  
1034 monitoring reports summarizing monitoring as required by this Part, as well as  
1035 summaries of all instances of deviations from the requirements of this Part. For  
1036 the January through June monitoring period, the owner or operator shall submit  
1037 the monitoring report by July 31 of that year. For the July through December  
1038 monitoring period, the owner or operator shall submit the monitoring report by  
1039 January 31 of the following year. All reports must be certified by a responsible  
1040 official that the information submitted is complete, true, and accurate.

~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED RULE~~

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: Implementing Section 10 of the Environmental Protection Act (~~Act~~) and authorized by Sections 27, 28.2, and 28.5 of the Act [415 ILCS 5/10, 27, 28.2, and 28.5].

SOURCE: Adopted at 38 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

**Section 226.100 Severability**

If any Section, subsection, or clause of this Part is found invalid, ~~such that~~ 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**

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 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 <del>et seq.</del>
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~~ context, all terms not defined ~~herein in this Part~~ 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~~ 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.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

“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 ~~These~~ 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, ~~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~~ lead-containing material” or “~~Lead~~ lead-containing metal” or “~~Lead~~ lead-containing wastes” or “~~Lead~~ 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, incorporated by reference in Section 226.120.

“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



POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

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 the particulate 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 These 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 These 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) or enclosures and is not connected to a duct in which a fan is installed.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

“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~~these 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”area 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.

“Section Manager” means the Manager of Illinois EPA's Bureau of Air Compliance Section.

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

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

“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~~ appendix A, Method 29 (2012).
- d) 40 CFR 60, ~~Appendix~~ appendix A, ~~Method~~ Methods 1, 1A (2012).
- e) 40 CFR 60, ~~Appendix~~ appendix A, ~~Method~~ Methods 2, 2A, 2C, and 2D (2012).
- f) 40 CFR 60, ~~Appendix~~ appendix A, ~~Method~~ Methods 3, 3A (2012).

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- g) 40 CFR 60, ~~Appendix~~appendix A, Method 4 (2012).
- h) 40 CFR 60, ~~Appendix~~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:

- a) Part of Madison County, specifically the area bounded by Granite City Township and Venice Township, 75 FR 71033-01 (November 22, 2010); and
- 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.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

**Section 226.140 Lead Emission Standards**

- a) For all alloying and refining kettles located at a source subject to this Part, ~~pursuant to (see 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, 226.155.~~ 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~~each 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 (see 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, 226.155.~~ 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~~each 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.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- d) For induction furnaces located at a source subject to this Part pursuant to ~~(see 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 ~~(see Section 226.125 of this Part)~~, but not subject to ~~subsections subsection~~ (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 ~~(see Section 226.125 of this Part)~~ must operate pursuant to a lifetime operating permit, a federally enforceable state 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.~~ 226.140. 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~~ 8 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.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 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 the 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 the 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 (a)(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.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 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 (a)(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; or
    - (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 the 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. 226.140.
  - 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



POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

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) or enclosures 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~~those 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~~

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

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.

$Q_o$  = 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) ~~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~~ of this Section:

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 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~~3 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~~10 meters of the midpoint of a straight line between the ~~two~~2 other monitors specified. The midpoint monitor must not be located on the same wall as either of the other ~~two~~2 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~~Hg) with a minimum accuracy of plus or minus 0.001 inches of water (0.002 mm ~~mercury~~Hg).
- 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.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 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) Continuous Parametric Monitoring Plan containing the information required in subsections subsection (d)(1), (2), or (3) below. The CPMP must be submitted for review and approval to the Illinois EPA, directed to the Section 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~~ the 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~~ those 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.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 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~~.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- A) ~~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~~ those locations are appropriate for demonstrating ongoing compliance, and provide a schedule for instrumentation calibration.
- B) ~~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~~ Section 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~~ The 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~~ The inspections of control devices must include all structures that comprise the infrastructure of the affected control device and other structures ~~which~~ that are necessary for the affected control device to function in its intended capacity.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 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) ~~2)~~ Source buildings housing lead emission units;
  - 3) Battery storage areas;
  - 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 Section 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

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

any changes are made to ~~such plan~~the program. 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 following ~~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~~7 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.



POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 3) All areas within the property boundaries subject to vehicle traffic must be paved and must be cleaned at least once every ~~seven~~7 calendar days to remove dust or other accumulated material from paved areas within the property boundaries. ~~Such~~The 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~~7 calendar days. Within 72 hours ~~of~~after 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~~in this subsection (c)(7). All vacuuming referenced in this subsection (c)(7) 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:

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 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; and
  - D) In those instances ~~wherein which~~ 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 ~~(c)(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, or 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) Retesting
  - 1) The owner or operator of an existing lead emission unit that is subject to this Part and that performed all testing necessary to demonstrate

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

compliance with Section 226.140 of this Part prior to January 1, 2015, 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. if:

1A) 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;

2B) The owner or operator submitted the results of such the tests to the Illinois EPA, and the tests were not rejected by the Illinois EPA;

3C) The same capture system and control device(s) or devices tested as referenced in under subsection (b)(1) above (A) are still being used by the subject lead emission unit; and

4D) The owner or operator complies with all recordkeeping and reporting requirements in Section 226.185(i) of this Part.

2) 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).

- 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.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- e) When, as determined by the Illinois EPA or USEPA, it is necessary to conduct testing to demonstrate compliance with Section ~~226.140 of this Part, 226.140~~, the owner or operator of a lead emission unit subject to this Part must, at his or her own expense, have ~~such~~the 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~~that 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~~that 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 ~~subsection~~subsection (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~~, Manager, the Illinois EPA may, in its sole discretion, waive the 45-day requirement. ~~Such~~A waiver is only effective if it is provided in writing by the ~~Manager of the Bureau of Air's Compliance Section~~, Manager 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~~, Manager, at least 30 days prior to the expected date of the emissions test and, again, 5 days prior to ~~such~~the testing. Upon written request directed to the ~~Manager of the Bureau of Air's Compliance Section~~ Manager, the Illinois EPA may, in its sole discretion, waive the 30-day requirement or the 5-day requirement. ~~Such~~A waiver is only effective if it is provided in writing by the ~~Manager of the Bureau of Air's Compliance Section~~, Manager or his or her designee.
- i) If, after the 30-days<sup>2</sup> 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<sup>2</sup> notice of the rescheduled date of the test or by arranging a new test date with the Illinois EPA by mutual agreement.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 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~~ subsection (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~~ Manager.
- 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 C.F.R. ~~CFR~~ 60, subpart A, and appendix A, Methods 1 (1 or 1A), 2 (2, 2A, 2C, or 2D), 3 (3 or 3A), and ~~4,4~~ and ~~Methods~~ Method 12 or 29, as incorporated by reference in Section ~~226.120 of this Part,~~ 226.120, 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~~ 3 runs must be performed and the arithmetic average of ~~three~~ 3 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~~ 3 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~~ 3 test runs, then the average must be calculated based upon the results of all valid test runs.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- C) Notwithstanding subsection (1)(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 (1)(4)(C) and verification by the ~~Illinois EPA, Section~~ 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~~ 2 valid test runs is required to determine compliance;
- 5) Each test for lead emissions must be conducted during conditions representative of maximum lead emissions; and
- 6) If an owner or operator of a lead emission unit does not meet the criteria for averaging of subsection (1)(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 those~~ emissions in accordance with the requirements of this Section or calculate ~~such the~~ emissions by means of collecting area time-weighted average lead samples and analyzing ~~such those~~ samples through the use of OSHA Method 1006. If an owner or operator of a lead emission unit subject to this ~~part~~ Part elects to calculate lead emissions from an uncontrolled stack, ~~such the~~ calculations must be completed at least once every ~~five~~ 5 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 the~~ 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.

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 2) The owner or operator must keep and maintain all records required by this Section at the source for at least ~~five~~5 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,~~ Section Manager 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 ~~sueh~~the 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~~The 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);

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 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~~the 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; and
  - 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~~the pressure changes and, if applicable, every alarm from the leak detection system, and any maintenance and repair activities performed as a result of ~~such~~the investigation. ~~Said~~The 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~~ 226.170.



POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 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~~the 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; and
  - 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.~~226.175.
- 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~~The 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~~The 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.~~

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED RULE

- 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.~~ 226.160.
  
- m) The owner or operator of a lead emission unit subject to this Part must notify the Illinois EPA, ~~directed to the~~ Section Manager of the Bureau of Air's Compliance Section, within ~~five~~ 5 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~~ the deviations, a discussion of the possible cause of ~~such~~ the 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~~ Manager. ~~Such~~ The 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.

Document comparison by Workshare Compare on Wednesday, November 27, 2013 12:51:54 PM

Input	
Document 1 ID	file:///I:/Input/Agency Rulemakings - Files Received/2013/NOV 2013/35-226-Agency(issue49).docx
Description	35-226-Agency(issue49)
Document 2 ID	file:///I:/Input/Agency Rulemakings - Files Received/2013/NOV 2013/35-226-JCARr01(issue49).docx
Description	35-226-JCARr01(issue49)
Rendering set	Standard

Legend	
<u>Insertion</u>	
<del>Deletion</del>	
<del>Moved from</del>	
<u>Moved to</u>	
Style change	
Format change	
<del>Moved deletion</del>	
Inserted cell	
Deleted cell	
Moved cell	
Split/Merged cell	
Padding cell	

Statistics	
	Count
Insertions	271
Deletions	342
Moved from	2
Moved to	2
Style change	0
Format changed	0
Total changes	617