From: McGill, Richard
To: Brown, Don
Subject: PC for R18-21 (Part 214)
Date: Monday, March 26, 2018 4:07:09 PM
Attachments: 35-214ProposedChanges.docx
35-214.docx

Good afternoon, Mr. Clerk:

Please add this email and two attachments to the R18-21 record as a PC from Jonathan Eastvold of JCAR staff.

Please indicate in the docket entry that this concerns Part 214.

If you have any questions, please let me know. Thank you.

From: Eastvold, Jonathan C. [mailto:JonathanE@ilga.gov]
Sent: Monday, March 26, 2018 3:49 PM
To: McGill, Richard <Richard.McGill@illinois.gov>
Subject: [External] 35 IAC 214

Jonathan C. Eastvold, Ph.D.
Rules Analyst II
Joint Committee on Administrative Rules
Illinois General Assembly

700 Stratton Building
Springfield, IL 62706

Tel.: 217-785-2254
JonathanE@ilga.gov

	Line	Citation	Change
1.	710	214.181	"U.S.C." to "USC"
2.	767	214.185	"forseeable" to "foreseeable"
3.	856	214.202	"U.S.C.A." to "USCA"
4.	1441	214.600	Add space before "means"
5.	1879	214.Appendix A	Change "Appendix A" to "Section 214.Appendix A"
6.	1883	214.Appendix B	Change "Appendix A" to "Section 214.Appendix B"
7.	1888	214.Appendix C	Change "Appendix A" to "Section 214.Appendix C"
8.	1925	214.Appendix D	Change "Appendix A" to "Section 214.Appendix D"

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

PART 214
SULFUR LIMITATIONS

SUBPART A: GENERAL PROVISIONS

SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES

SUBPART C: EXISTING SOLID FUEL COMBUSTION EMISSION SOURCES

SUBPART D: EXISTING LIQUID OR MIXED FUEL COMBUSTION EMISSION SOURCES

SUBPART E: AGGREGATION OF SOURCES OUTSIDE METROPOLITAN AREAS

SUBPART V: ELECTRIC POWER PLANTS

Section

214.521 Winnetka Power Plant (Repealed)

SUBPART X: UTILITIES

Section

214.560 Scope

214.561 E. D. Edwards Electric Generating Station (Repealed)

214.562 Coffeen Generating Station

SUBPART AA: REQUIREMENTS FOR CERTAIN SO_2 SOURCES

Section

214.600 Definitions

214.601 Applicability

214.602 Compliance Deadline

214.603 Emission Limitations

214.604 Monitoring and Testing

214.605 Recordkeeping and Reporting

214.APPENDIX A Rule into Section Table

214.APPENDIX B Section into Rule Table

214.APPENDIX C Method used to Determine Average Actual Stack Height and Effective Height of Effluent Release

214.APPENDIX D Past Compliance Dates

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

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 204: Sulfur Emission Standards and Limitations, R71-23, 4 PCB 191, filed and effective April 14, 1972; amended in R74-2 and R75-5, 32 PCB 295, at 3 Ill. Reg. 5, p. 777, effective February 3, 1979; amended in R74-2, R75-5, 38 PCB 129, at 4 Ill. Reg. 28, p. 417, effective June 26, 1980; amended in R78-17, 40 PCB 291, at 5 Ill. Reg. 1892, effective February 17, 1981; amended in R77-15, 44 PCB 267, at 6 Ill. Reg. 2146, effective January 28, 1982; amended and renumbered in R80-22(A) at 7 Ill. Reg. 4220, effective March 28, 1983; codified at 7 Ill. Reg. 13597; amended in R80-22(B) at 8 Ill. Reg. 6172, effective April 24, 1984; amended in R84-28 at 10 Ill. Reg. 9806, effective May 20, 1986; amended in R86-31 at 12 Ill. Reg. 17387, effective October 14, 1988; amended in R86-30 at 12 Ill. Reg. 20778, effective December 5, 1988; amended in R87-31 at 15 Ill. Reg. 1017, effective January 15, 1991; amended in R02-21 at 27 Ill. Reg. 12101, effective July 11, 2003; amended in R04-12/20 at 30 Ill. Reg. 9671, effective May 15, 2006; amended in R15-21 at 39 Ill. Reg. 16174, effective December 7, 2015.

SUBPART A: GENERAL PROVISIONS

Section 214.100 Scope and Organization

a) This Part sets standards and limitations for emission of sulfur from stationary sources.

b) Permit for sources subject to this Part may be required pursuant to 35 Ill. Adm. Code 201.

c) Notwithstanding the provisions of this Part, the air quality standards contained in 35 Ill. Adm. Code 243 may not be violated.

d) This Part is divided into Subparts which are grouped as follows:

1) Subpart A: General Provisions

2) Subparts B - J: Fuel Combustion Emission Sources and Incinerators

3) Subparts K - M: Process Emission Sources

4) Subparts N - End: Industry and site specific rules.

e) These rules have been grouped for the convenience of the public; the scope of each is determined by its language and history.

(Source: Added and codified at 7 Ill. Reg. 13597)

Section 214.101 Measurement Methods

A determination of non-compliance based on any subsection of this Section shall not be refuted by evidence of compliance with any other subsection.

a) Sulfur Dioxide Measurement. Measurement of sulfur dioxide emissions from stationary sources shall be made according to an applicable method specified in 40 CFR 60, appendix A, Method 6, 6A, 6B, or 6C, incorporated by reference in Section 214.104(a), or by measurement procedures established pursuant to 40 CFR 60.8(b), incorporated by reference in Section 214.104(b), or by an installed certified continuous emissions monitoring system, or by an alternative monitoring method available under 40 CFR 75, incorporated by reference in Section 214.104(e).

b) Sulfuric Acid Mist and Sulfur Trioxide Measurement. Measurement of sulfuric acid mist and sulfur trioxide shall be according to the barium-thorin titration method specified in 40 CFR 60, appendix A, Method 8, incorporated by reference in Section 214.104(a), or a controlled condensate method approved in writing by the Agency.

c) Solid Fuel Averaging Measurement Daily Analysis Method. This subsection applies to sources at plants with total solid fuel-fired heat input capacity exceeding 439.5 MW (1500 mmBtu/hr). If daily fuel analysis is used to demonstrate compliance or non-compliance with Sections 214.122, 214.141, 214.142(a) 214.162, 214.186 and 214.421, the sulfur dioxide emission rate to be compared to the emission limit shall be considered to be the result of averaging daily samples taken over any consecutive two-month period provided no more than 5 percent of the sample values are greater than 20 percent above the sample average. If samples from a source cannot meet this statistical criterion, each individual daily sample analysis for such source shall be compared to the source's emission limit to determine compliance. The specific ASTM procedures, incorporated by reference in Section 214.104(c), shall be used for solid fuel sampling, sulfur, and heating value determinations.

d) Weekly Analysis Method. This subsection applies to sources at plants with total solid fuel-fired heat input capacity exceeding 146.5 MW (500 mmBtu/hr) but not exceeding 439.5 MW (1500 mmBtu/hr). These plants shall demonstrate compliance or non-compliance with Sections 214.122, 214.141, 214.142(a), 214.162, 214.186 and 214.421 by either an analysis of calendar weekly composites of daily fuel samples or by compliance with subsection (c), at the option of the plant. The specific ASTM procedures incorporated by reference in Section 214.104(c), shall be used for sulfur and heating value determinations.

e) Monthly Analysis Method. This subsection applies to sources at plants with total fuel-fired heat input capacity exceeding 14.65 MW (50 mmBtu/hr) but not exceeding 146.5 MW (500 mmBtu/hr). These plants shall demonstrate compliance or non-compliance with Sections 214.122, 214.141, 214.142(a), 214.162, 214.186 and 214.421 by either an analysis of calendar monthly composites of daily fuel samples or by compliance with subsection (c), at the option of the plant. ASTM procedures incorporated by reference in Section 214.104(c), shall be used for sulfur and heating value determinations.

f) Small Source Alternative Method. This subsection applies to sources at plants with total solid fuel-fired heat input capacity not exceeding 14.65 MW (50 mmBtu/hr). Compliance or non-compliance with Sections 214.122, 214.141, 214.142(a), 214.162, 214.186 and 214.421 shall be demonstrated by a calendar month average sulfur dioxide emission rate.

g) Exemptions. Subsections (c) through (f) shall not apply to sources controlling sulfur dioxide emissions by flue gas desulfurization equipment or by sorbent injection.

h) Hydrogen Sulfide Measurement. For purposes of determining compliance with Section 214.382(c), the concentration of hydrogen sulfide in petroleum refinery fuel gas shall be measured using the Tutwiler Procedure specified in 40 CFR

60.648, incorporated by reference in Section 214.104(d).

(Source: Amended at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.102 Abbreviations and Units

a) The following abbreviations are used in this Part:

BTU or btu	British thermal units
ft	foot
gr	grains
J	Joule
kg	kilogram
kg/MW-hr	kilograms per megawatt-hour
km	kilometer
lbs	pounds
lbs/mmBtu	pounds per million Btu
m	meter
mg	milligram
Mg	megagram, metric ton or tonne
mi	mile
mmBtu	million British thermal units
mmBtu/hr	million British thermal units per hour
MW	megawatt; one million watts
MW-hr	megawatt-hour
ng	nanogram; one billionth of a gram
ng/J	nanograms per Joule
ppm	parts per million
scf	standard cubic foot
scm	standard cubic meter
T	English ton

b) The following conversion factors have been used in this Part:

English	Metric
2.205 lb	1 kg
1 T	0.907 Mg
1 lb/T	0.500 kg/Mg
mmBtu/hr	0.293 MW
1 lb/mmBtu	1.548 kg/MW-hr
1 mi	1.61 km
1 gr/scf	2289 mg/scm

(Source: Amended at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.103 Definitions

Unless otherwise indicated, the definitions of 35 Ill. Adm. Code 201 and 211 apply to this Part.

(Source: Amended at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.104 Incorporations by Reference

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

a) 40 CFR 60, Appendix A (2014):

1) Method 1: Sample and Velocity Traverses for Stationary Sources;

2) Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate;

3) Method 3: Gas Analysis for the Determination of Dry Molecular Weight;

4) Method 4: Determination of Moisture Content in Stack Gases;

5) Method 6: Determination of Sulfur Dioxide Emissions From Stationary Sources;

6) Method 6A: Determination of Sulfur Dioxide, Moisture, and Carbon Dioxide Emissions From Fossil Fuel Combustion Sources;

7) Method 6B: Determination of Sulfur Dioxide and Carbon Dioxide Daily Average Emissions From Fossil Fuel Combustion Sources;

8) Method 6C: Determination of Sulfur Dioxide Emissions From Stationary Sources (Instrumental Analyzer Procedure);

9) Method 8: Determination of Sulfuric Acid Mist and Sulfur Dioxide Emissions From Stationary Sources;

10) Method 19: Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxide Emission Rates.

b) 40 CFR 60.8(b) (2014), Performance Tests.

c) American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103:

1) For solid fuel sampling:

ASTM D-2234 (1989)

ASTM D-2013 (1986)

2) For sulfur determinations:

ASTM D-3177 (1984)

ASTM D-2622 (1987)

ASTM D-3180 (1984)

ASTM D-4239 (1985)

3) For heating value determinations:

ASTM D-2015 (1985)

ASTM D-3286 (1985)

d) Tutwiler Procedure for hydrogen sulfide, 40 CFR 60.648 (2014).

e) 40 CFR 75 (2014).

f) USEPA's Emission Measurement Center Guideline Document (GD-042), Preparation and Review of Site-Specific Emission Test Plans, Revised March 1999.

(Source: Amended at 39 Ill. Reg. 16174, effective December 7, 2015)

SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES

Section 214.120 Scope

Subparts B through F contain general rules for sulfur emissions from fuel combustion emission sources. These may be modified by industry and site specific rules in Subparts N et seq.

(Source: Added and codified at 7 Ill. Reg. 13597)

Section 214.121 Large Sources

This Section applies to new fuel combustion emission sources with actual heat input greater than 73.2 MW (250 mmBtu/hr).

a) Solid Fuel Burned Exclusively. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel

combustion emission source greater than 73.2 MW (250 mmBtu/hr), burning solid fuel exclusively, to exceed 1.86 kg of sulfur dioxide per MW-hr of actual heat input (1.2 lbs/mmBtu).

(BOARD NOTE: This Section was invalidated in Commonwealth Edison v. PCB, 25 Ill. App.3d 271, 62 Ill.2d 494, 43 N.E.2d 459, 323 N.E.2d 84, Ashland Chemical Corp. v. PCB, 64 Ill. App.3d 169, and Illinois State Chamber of Commerce v. PCB, 67 Ill. App.3d 839, 384 N.E.2d 922, 78 Ill.2d 1, 398 N.E.2d 9.)

b) Liquid Fuel Burned Exclusively.

1) Prior to January 1, 2017, no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion emission source with actual heat input greater than 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, to exceed the following:

A) 1.2 kg of sulfur dioxide per MW-hr of actual heat input when residual fuel oil is burned (0.8 lbs/mmBtu); and

B) 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu);

2) On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input greater than 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

A) The sulfur content of all residual fuel oil used by the fuel combustion emission source must not exceed 1000 ppm;

B) The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm; and

C) The owner or operator must:

i) Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in subsections (b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil;

ii) Retain the records for at least 5 years, and provide copies of the records to the Agency within 30 days after receipt of a request by the Agency; and

iii) Notify the Agency within 30 days after discovery of deviations from any of the requirements in this subsection (b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

(Source: Amended at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.122 Small Sources

This Section applies to new fuel combustion emission sources with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr).

a) Solid Fuel Burned Exclusively. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning solid fuel exclusively, to exceed 2.79 kg of sulfur dioxide per MW-hr of actual heat input (1.8 lbs/mmBtu).

b) Liquid Fuel Burned Exclusively.

1) Prior to January 1, 2017, no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, to exceed the following:

A) 1.55 kg of sulfur dioxide per MW-hr of actual heat input when residential fuel oil is burned (1.0 lbs/mmBtu); and

B) 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu);

2) On and after January 1, 2017, the owner or operator of a new fuel combustion emission source with actual heat input smaller than, or equal to, 73.2 MW (250 mmBtu/hr), burning liquid fuel exclusively, must comply with the following:

A) The sulfur content of all residual fuel oil used by the fuel combustion emission source must not exceed 1000 ppm;

B) The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm; and

C) The owner or operator must:

i) Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in subsections (b)(2)(A) and (b)(2)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil;

ii) Retain the records for at least 5 years, and provide copies of the records to the Agency within 30 days after receipt of a request by the Agency; and

iii) Notify the Agency within 30 days after discovery of deviations from any of the requirements in this subsection (b)(2). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

(Source: Amended at 39 Ill. Reg. 16174, effective December 7, 2015)

SUBPART C: EXISTING SOLID FUEL COMBUSTION EMISSION SOURCES

Section 214.140 Scope

This Subpart contains rules which establish general sulfur emissions standards for existing solid fuel emission sources. These may be modified by industry and site-specific rules in Subparts N, et seq.

(Source: Added at 10 Ill. Reg. 9806, effective May 20, 1986)

Section 214.141 Sources Located in Metropolitan Areas

Except as otherwise provided in this Part, no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any existing fuel combustion source, burning solid fuel exclusively, located in the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas, to exceed 1.8 pounds of sulfur dioxide per mmBtu of actual heat input (774 nanograms per joule).

a) Sources located in Kankakee or McHenry Counties shall not exceed 6.8 pounds of sulfur dioxide per mmBtu of actual heat input (2,924 nanograms per joule) in any one hour period.

b) Existing industrial sources, not equipped with flue gas desulfurization systems as of December 1, 1980, located in the Peoria major metropolitan area, shall not exceed 5.5 pounds of sulfur dioxide per mmBtu of actual heat input (2,365 nanograms per joule) in any one hour period, provided the emissions from any such source located in the City of Peoria exit from a stack which is at least 154 feet (47 meters) in height.

c) Sections 214.122 and 214.101(c) shall not apply to any fuel combustion emission sources equipped with flue gas desulfurization systems as of December 1, 1980, and located in the City of East Peoria as the city boundaries were then defined. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any such sources to exceed 1.4 pounds of sulfur dioxide per mmBtu of actual heat input (602 nanograms per joule).

d) Sections 214.122 and 214.101(c) shall not apply to any fuel combustion emission sources which are capable of firing solid fuel at a heat input of more than 125 mmBtu per hour (36.6 megawatts) and which as of December 1, 1980, are equipped with flue gas desulfurization systems and are located in Hollis Township, Peoria County, as the township boundaries were then defined. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any such sources to exceed 1.1 pounds of sulfur dioxide per mmBtu of actual heat input (473 nanograms per joule).

(Source: Amended at 10 Ill. Reg. 9806, effective May 20, 1986)

Section 214.142 Small Sources Located Outside Metropolitan Areas

This section applies to existing fuel combustion sources with actual heat input less than, or equal to, 73.2 MW (250 mmbtu/hr) located outside the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any existing fuel combustion source with actual heat input less than, or equal to, 73.2 MW (250 mmbtu/hr), burning solid fuel exclusively, located outside the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas, to exceed either of the following, whichever such person determines shall apply:

a) 10.5 kg of sulfur dioxide per MW-hr of actual heat input (6.8 lbs/mmbtu), provided such owner or operator complies with all applicable provisions of Section 214.186, or

b) The emission limit provided by Subpart E.

(Source: Amended at 4 Ill. Reg. 28, p. 217, effective June 26, 1980)

Section 214.143 Large Sources Located Outside Metropolitan Areas

This section applies to existing fuel combustion sources with actual heat input greater than 73.2

MW (250 mmbtu/hr) located outside the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas. No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any existing fuel combustion source with actual heat input greater than 73.2 MW (250 mmbtu/hr), burning solid fuel exclusively, located outside the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas, to exceed the emission limit provided by Subpart E.

(Source: Amended at 4 Ill. Reg. 28, p. 417, effective June 26, 1980)

SUBPART D: EXISTING LIQUID OR MIXED FUEL COMBUSTION EMISSION SOURCES

Section 214.161 Liquid Fuel Burned Exclusively

a) Prior to January 1, 2017, no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any existing fuel combustion emission source, burning liquid fuel exclusively, to exceed the following:

1) 1.55 kg of sulfur dioxide per MW-hr of actual heat input when residual fuel oil is burned (1.0 lbs/mmBtu); and

2) 0.46 kg of sulfur dioxide per MW-hr of actual heat input when distillate fuel oil is burned (0.3 lbs/mmBtu).

b) Except as provided in subsections (c) and (d), on and after January 1, 2017, the owner or operator of an existing fuel combustion emission source, burning liquid fuel exclusively, must comply with the following:

1) The sulfur content of all residual fuel oil used by the fuel combustion emission source must not exceed 1000 ppm;

2) The sulfur content of all distillate fuel oil used by the fuel combustion emission source must not exceed 15 ppm; and

3) The owner or operator must:

A) Maintain records demonstrating that the fuel oil used by the fuel combustion emission source complies with the requirements in subsections (b)(1) and (b)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil;

B) Retain the records for at least 5 years, and provide copies of the records to the Agency within 30 days after receipt of a request by the Agency; and

C) Notify the Agency within 30 days after discovery of deviations from any of the requirements in this subsection (b). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

c) The sulfur content limitation for distillate fuel oil in subsection (b)(2) does not apply to existing electric generating units at Midwest Generation's Joliet station (located at or near 1800 Channahon Road, Joliet IL), Powerton station (located at or near 13082 E. Manito Road, Pekin IL), Waukegan station (located at or near 401 E. Greenwood Avenue, Waukegan IL), and Will County station (located at or near 529 E. 135th, Romeoville IL). The owner or operator of such electric generating units must instead comply with the following:

1) From January 1, 2016 through December 31, 2018, the sulfur content of all distillate fuel oil purchased for use by such electric generating units must not exceed 15 ppm;

2) From January 1, 2017 through December 31, 2018, the sulfur content of all distillate fuel oil used by such electric generating units must not exceed 500 ppm;

3) On and after January 1, 2019, the sulfur content of all distillate fuel oil used by such electric generating units must not exceed 15 ppm;

4) The owner or operator must:

A) Maintain records demonstrating that the distillate fuel oil purchased from January 1, 2016 through December 31, 2018 for use by the electric generating units complies with the requirements in subsection (c)(1), such as records from the fuel supplier indicating the sulfur content of the fuel oil, and maintain records indicating the date of purchase of the fuel oil;

B) Maintain records demonstrating that the distillate fuel oil used from January 1, 2017 through December 31, 2018, by the electric generating units, complies with the requirements in subsection (c)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil;

C) On and after January 1, 2019, maintain records demonstrating that the distillate fuel oil used by the electric generating units complies with the requirements in subsection (c)(3), such as records from the fuel supplier indicating the sulfur content of the fuel oil;

D) Retain all records required by this subsection (c) for at least 5 years, and provide copies of the records to the Agency within 30 days after receipt of a request by the Agency; and

E) Notify the Agency within 30 days after discovery of deviations from any of the requirements in this subsection (c). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

d) The sulfur content limitation for distillate fuel oil in subsection (b)(2) does not apply to existing fuel combustion emission sources at Caterpillar's Montgomery facility (located at or near 325 South Route 31, Montgomery IL). The owner or operator of the fuel combustion emission sources must instead comply with the following:

1) On and after January 1, 2016:

A) The sulfur content of all distillate fuel oil purchased for use by the fuel combustion emission sources must not exceed 15 ppm; and

B) The sulfur content of all distillate fuel oil used by the fuel combustion emission sources must not exceed 500 ppm;

2) The owner or operator must:

A) Maintain records demonstrating that the distillate fuel oil purchased on and after January 1, 2016 for use by the fuel combustion emission sources complies with the requirements in subsection (d)(1)(A), such as records from the fuel supplier indicating the sulfur content of the fuel oil, and maintain records indicating the date of purchase of the fuel oil;

B) Maintain records demonstrating that the distillate fuel oil used on and after January 1, 2016 by the fuel combustion emission sources complies with the requirements in subsection (d)(1)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil;

C) Retain all records required by this subsection (d) for at least 5 years, and provide copies of the records to the Agency within 30 days after receipt of a request by the Agency; and

D) Notify the Agency within 30 days after discovery of deviations from any of the requirements in this subsection (d). At minimum,

and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

(Source: Amended at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.162 Combination of Fuels

a) No person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any fuel combustion emission source burning simultaneously any combination of solid, liquid and gaseous fuels to exceed the allowable emission rate determined by the following equation:

$$E = S_S H_S + S_d H_d + S_R H_R$$

b) Symbols in the equation mean the following:

E = allowable sulfur dioxide emission rate;
S_S = solid fuel sulfur dioxide emission standard which is applicable;
S_d = distillate oil sulfur dioxide emission standard determined from the table in subsection (d);
S_R = residual fuel oil sulfur dioxide emission standard;
H_S = actual heat input from solid fuel;
H_d = actual heat input from distillate fuel oil;
H_R = actual heat input from residual fuel oil.

c) That portion of the actual heat input that is derived:

1) From the burning of gaseous fuels produced by the gasification of solid fuels shall be included in H_S;

2) From the burning of gaseous fuels produced by the gasification of distillate fuel oil shall be included in H_d;

3) From the burning of gaseous fuels produced by the gasification of residual fuel oil shall be included in H_R;

4) From the burning of gaseous fuels produced by the gasification of any other liquid fuel shall be included in H_R; and

5) From the burning of by-product gases such as those produced from a blast furnace or a catalyst regeneration unit in a petroleum refinery shall be included in H_R.

d) Metric or English units may be used in the equation of subsection (a) as follows:

Parameter	Metric	English
E	kg/hr	lbs/hr
S_S, S_R	kg/MW-hr	lbs/mmBtu
S_d prior to January 1, 2017	0.46 kg/MW-hr	0.3 lbs/mmBtu
S_d on and after January 1, 2017	0.0023 kg/MW-hr	0.0015 lb/mmBtu
H_S, H_d, H_R	MW	mmBtu

(Source: Amended at 39 Ill. Reg. 16174, effective December 7, 2015)

SUBPART E: AGGREGATION OF SOURCES
OUTSIDE METROPOLITAN AREAS

Section 214.181 Dispersion Enhancement Techniques

No owner or operator of an existing fuel combustion emission source shall comply with the emission standards of this Subpart by the use of dispersion enhancement techniques. Dispersion enhancement techniques shall include, but not be limited to, an intermittent control system or an increase of: stack height in excess of good engineering practice necessary to prevent downwash or fumigation conditions, stack diameter, exit gas velocity, or exit gas temperature, except as provided by Section 123 of the Clean Air Act (42 USC~~U.S.C.~~ 7423) and regulations promulgated thereunder. Flue gas may be reheated where air pollution control equipment results in a reduction of flue gas temperature, provided that the degree of reheat does not exceed the temperature drop across such air pollution control equipment.

(Source: Amended at 3 Ill. Reg. 5, p. 777, effective February 3, 1979)

Section 214.182 Prohibition

No person shall cause or allow the total emissions of sulfur dioxide into the atmosphere in any one hour period from all fuel combustion emission sources, located outside of the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas, owned or operated by such person and located within a one mile radius (1.6 km) from the center point of any such fuel combustion emission source to exceed the emissions determined by the following Sections 214.183 through 214.185, whichever is applicable.

Section 214.183 General Formula

a) The general formula is:

$$\frac{E = (H_A)^{0.11} (H_E)^2}{128} \qquad \text{(in English units)}$$

$$E = 0.04347(H_A)^{0.11}(H_E)^2 \qquad \text{(in Metric units)}$$

b) Symbols used in the general formula mean the following:

E = Total allowable emission of sulfur dioxide (in lbs/hr or kg/hr) into the atmosphere in any one-hour period from all fuel combustion emission sources owned or operated by such person and located within a 1.6 km (1 mile) radius from the center point of any such emission source.

H_A = Average actual stack height as determined by method outlined in Appendix C.

H_E = Effective height of effluent release as determined by method outlined in Appendix C.

(Source: Amended at 30 Ill. Reg. 9671, effective May 15, 2006)

Section 214.184 Special Formula

a) If the maximum total emissions of sulfur dioxide into the atmosphere in any one hour period from all fuel combustion emission sources owned or operated by any person and located within a 1 mile (1.6 km) radius from the center point of any such fuel combustion emission sources exceed, during normal cyclical variations in firing rate and fuel, the emissions allowed under Section 214.183 but, as of April 1, 1978, were in compliance with either the formula detailed below or a Pollution Control Board (Board) order, then the owner or operator of the emission sources shall not cause or allow such emissions to exceed the emissions allowed under Section 214.183 or the formula detailed below, whichever the owner or operator of the emission sources determines shall apply.

b) $E = 20{,}000 \left(\frac{H_S}{300} \right)^2$ (in English units)

$E = 4.8824 \times 20{,}000 \left(\frac{H_S}{300} \right)^2$ (in Metric units)

$H = P_1 H_1 + P_2 H_2 + \ldots P_n H_n$

(Note: $P_1 + P_2 \ldots P_n = 1$)

c) As used in these equations, symbols mean the following:

E = total emission of sulfur dioxide in lbs/hr or kg/hr into the atmosphere in any one hour period from all fuel combustion emission sources owned or operated by such person and located within a 1 mile (1.6 km) radius from the center point of any such emission source;

P_i = (for i = 1, 2, . . . ,n) percentage of total emissions E emitted from source i expressed as decimal equivalents (e.g., 21% = 0.21); and

H_i = (for i = 1, 2, . . . ,n) physical height (in feet or meters) above grade of stack

i.

(Source: Amended at 30 Ill. Reg. 9671, effective May 15, 2006)

Section 214.185 Alternative Emission Rate

Any owner or operator of a fuel combustion emission source may petition the Board for approval of an emission rate applicable to any one hour period for all fuel combustion emission sources owned or operated by such person and located within a one mile (1.6 km) radius from the center point of any such fuel combustion emission source. Such person shall prove in an adjudicative hearing before the Board that the proposed emission rate will not under any foreseeable~~forseeable~~ operating conditions and potential meteorological conditions cause or contribute to a violation of any applicable primary or secondary sulfur dioxide ambient air quality standard or violate any applicable prevention of significant deterioration (PSD) increment. An emission rate approved pursuant to this Section shall be a substitute for that standard determined by Section 214.183 or 214.184.

a) Every owner or operator of a fuel combustion emission source petitioning the Board for approval of an emission standard pursuant to this Section shall follow the applicable procedures described in 35 Ill. Adm. Code Subtitle A, Chapter I.

b) Any emission standard approved pursuant to this Section shall be included as a condition to operating permits issued pursuant to 35 Ill. Adm. Code 201. Any owner or operator of a fuel combustion emission source who receives Board approval of an emission standard pursuant to this Section shall apply to the Illinois Environmental Agency (Agency) within 30 days of approval of such standard for a revision of its operating permit for such source.

c) The Agency shall impose as a condition to a permit to operate a source pursuant to an emission standard approved pursuant to this Section an ambient sulfur dioxide monitoring and dispersion modeling program designed to verify that such emission standard will not cause or contribute to violations of any applicable primary or secondary sulfur dioxide ambient air quality standard. Such ambient monitoring and dispersion modeling program shall be operated for at least one year commencing no later than 6 months after the date of approval of an emission rate pursuant to this Section.

d) No more than 15 months after the commencement of the ambient monitoring and dispersion modeling program of subsection (c) the owner or operator shall apply for a new operating permit. The owner or operator shall submit, at the time of the application, a report containing the results of the ambient monitoring and dispersion modeling program.

(Source: Amended at 4 Ill. Reg. 28, p. 417, effective June 26, 1980)

Section 214.186 New Operating Permits

No owner or operator of a fuel combustion emission source whose sulfur dioxide emission limitation is determined by Section 214.142, 214.183 or 214.184 shall cause or allow the total emissions of sulfur dioxide into the atmosphere from all fuel combustion emission sources owned or operated by such person and located within 1 mile radius (1.6 km) from the center point of any such fuel combustion source to exceed the level of sulfur dioxide emission allowed under the previous Rule 204 (effective April 14, 1972 until December 14, 1978) without first obtaining a new operating permit from the Agency. The application for a new operating permit shall include a demonstration that such total emissions will not violate any applicable PSD increment.

(Source: Amended at 4 Ill. Reg. 28, p. 417, effective June 26, 1980)

SUBPART F: ALTERNATIVE STANDARDS FOR SOURCES INSIDE METROPOLITAN AREAS

Section 214.201 Alternative Standards for Sources in Metropolitan Areas

Any owner or operator of an existing fuel combustion emission source located in the Chicago, St. Louis (Illinois) or Peoria major metropolitan areas may petition the Board for approval of an alternate emission rate specified in emissions of pounds of sulfur dioxide per mmBtu of actual heat input for any such fuel combustion emission source, up to a maximum or 6.8 pounds of sulfur dioxide per mmBtu of actual heat input (10.5 kg/MW-hr). Such person shall prove in an adjudicative hearing before the Board that the proposed emission rate will not, under predictable worst case conditions cause or contribute to a violation of any applicable primary or secondary sulfur dioxide ambient air quality standard or of any applicable prevention of significant deterioration increment. An emission rate approved pursuant to this Section shall be a substitute for that standard otherwise required by this Part. Nothing in this Section, however, excuses a source subject to Subpart AA from complying with the requirements set forth in that Subpart.

a) Every owner or operator of an existing fuel combustion emission source so petitioning the Board for approval of an emission standard shall follow the applicable procedures described in 35 Ill. Adm. Code, Subtitle A, Chapter I.

b) Any emission standard so approved shall be included as a condition in operating permits issued pursuant to 35 Ill. Adm. Code 201. Any owner or operator of a fuel combustion emission source who receives Board approval of such an emission standard shall apply to the Agency within 30 days after approval of that standard for a revision of its operating permit for the source.

c) No owner or operator of an existing fuel combustion emission source shall seek an alternate emission rate under this Section, or comply with an alternate emission rate granted under this Section, by the use of dispersion enhancement techniques referred to in Section 214.202.

(Source: Amended at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.202 Dispersion Enhancement Techniques

No owner or operator of an existing fuel combustion emission source shall comply with the emission standards of this Subpart by the use of dispersion enhancement techniques. Dispersion enhancement techniques shall include, but not be limited to, an intermittent control system or an increase of: stack height in excess of good engineering practice necessary to prevent downwash or fumigation conditions, stack diameter, exit gas velocity, or exit gas temperature, except as provided by Section 123 of the Clean Air Act (42 USCA~~U.S.C.A.~~ 7423) and regulations promulgated thereunder. Flue gas may be reheated where air pollution control equipment results in a reduction of flue gas temperature, provided that the degree of reheat does not exceed the temperature drop across such air pollution control equipment.

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

SUBPART K: PROCESS EMISSION SOURCES

Section 214.300 Scope

Subpart K contains general rules for sulfur emissions from process sources. These may be modified by industry and site specific rules in other Subparts of this Part. Subpart K also contains sulfur content limitations for fuel oil used by process emission sources. These sulfur content limitations apply regardless of industry and site specific rules set forth in other Subparts of this Part.

(Source: Amended at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.301 General Limitation

Except as further provided by this Part, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to exceed 2000 ppm.

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.302 Exception for Air Pollution Control Equipment

Section 214.301 shall not apply to processes designed to remove sulfur compounds from the flue gases of fuel combustion emission sources.

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.303 Use of Sulfuric Acid

With the exception of fuel combustion emission sources and acid manufacturing, no person using sulfuric acid shall cause or allow the emission of sulfuric acid and/or sulfur trioxide from all other similar emission sources at a plant or premises to exceed:

a) 45.4 grams in any one hour period for sulfuric acid usage less than 1180 Mg/yr (100 percent acid basis) (0.10 lbs/hr up to 1300 T/yr);

b) 250 grams per metric ton of acid used for sulfuric acid usage greater than or equal to 1180 Mg/yr (100 percent acid basis) (0.50 lbs/T over 1300 T/yr).

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.304 Fuel Burning Process Emission Source

The emissions from the burning of fuel at process emission sources located in the Chicago or St. Louis (Illinois) major metropolitan areas shall comply with applicable Subparts B through F, except as follows: No person shall cause or allow the emissions of sulfur into the atmosphere in any one hour period from burning tea leaves as fuel to exceed 0.70 pounds of sulfur dioxide per mmbtu of actual heat input.

(Source: Added at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.305 Fuel Sulfur Content Limitations

a) Except as provided in subsections (b), (c), and (d), on and after January 1, 2017, the owner or operator of a process emission source must comply with the following:

1) The sulfur content of all residual fuel oil used by the process emission source must not exceed 1000 ppm;

2) The sulfur content of all distillate fuel oil used by the process emission source must not exceed 15 ppm; and

3) The owner or operator must:

A) Maintain records demonstrating that the fuel oil used by the process emission source complies with the requirements in subsections (a)(1) and (a)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil;

B) Retain the records for at least 5 years, and provide copies of the records to the Agency within 30 days after receipt of a request by the Agency; and

C) Notify the Agency within 30 days after discovery of deviations from any of the requirements in this subsection (a). At minimum, and in addition to any permitting obligations, such notification must include a description of the deviations, a discussion of the

possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

b) The sulfur content limitation for distillate fuel oil in subsection (a)(2) does not apply to distillate fuel oil used by ″TC-F/TC-L/TCL Wing 5″ and ″TC-F/TC-L Alternative″ at Caterpillar Technical Center (located at or near 1311 E. Cedar Hills Dr., Mossville IL) for purposes of research and development or testing of equipment intended for sale outside of Illinois. This exemption is limited to a combined total of 150,000 gallons of distillate fuel oil per calendar year. The sulfur content of the fuel oil must not exceed 500 ppm. The owner or operator of the process emission sources described in this subsection must also comply with the following:

1) Maintain records indicating the amount of distillate fuel oil used by the process emission sources each calendar year for purposes of research and development or testing of equipment for sale outside of Illinois, as well as records demonstrating that the fuel oil complies with the requirements in this subsection (b), such as records from the fuel supplier indicating the sulfur content of the fuel oil;

2) Retain the records for at least 5 years, and provide copies of the records to the Agency within 30 days after receipt of a request by the Agency; and

3) Notify the Agency within 30 days after discovery of deviations from any of the requirements in this subsection (b). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

c) The sulfur content limitation for distillate fuel oil in subsection (a)(2) does not apply to existing process emission sources at Caterpillar's Montgomery facility (located at or near 325 South Route 31, Montgomery IL). The owner or operator of these process emission sources must instead comply with the following:

1) On and after January 1, 2016:

A) The sulfur content of all distillate fuel oil purchased for use by the process emission sources must not exceed 15 ppm; and

B) The sulfur content of all distillate fuel oil used by the process emission sources must not exceed 500 ppm;

2) The owner or operator must:

A) Maintain records demonstrating that the distillate fuel oil purchased on and after January 1, 2016, for use by the process

emission sources, complies with the requirements in subsection (c)(1)(A), such as records from the fuel supplier indicating the sulfur content of the fuel oil, and maintain records indicating the date of purchase of the fuel oil;

B) Maintain records demonstrating that the distillate fuel oil used on and after January 1, 2016, by the process emission sources, complies with the requirements in subsection (c)(1)(B), such as records from the fuel supplier indicating the sulfur content of the fuel oil;

C) Retain all records required by this subsection (c) for at least 5 years, and provide copies of the records to the Agency within 30 days after receipt of a request by the Agency; and

D) Notify the Agency within 30 days after discovery of deviations from any of the requirements in this subsection (c). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

d) The sulfur content limitation for distillate fuel oil in subsection (a)(2) does not apply to existing electric generating units at Midwest Generation's Fisk station (located at or near 1111 W. Cermak Road, Chicago IL) or Waukegan station (located at or near 401 E. Greenwood Avenue, Waukegan IL). The owner or operator of these electric generating units must instead comply with the following:

1) From January 1, 2016 through December 31, 2018, the sulfur content of all distillate fuel oil purchased for use by these electric generating units must not exceed 15 ppm;

2) From January 1, 2017 through December 31, 2018, the sulfur content of all distillate fuel oil used by these electric generating units must not exceed 500 ppm;

3) On and after January 1, 2019, the sulfur content of all distillate fuel oil used by these electric generating units must not exceed 15 ppm;

4) The owner or operator must:

A) Maintain records demonstrating that the distillate fuel oil purchased from January 1, 2016 through December 31, 2018, for use by the electric generating units, complies with the requirements in subsection (d)(1), such as records from the fuel supplier

indicating the sulfur content of the fuel oil, and maintain records indicating the date of purchase of the fuel oil;

B) Maintain records demonstrating that the distillate fuel oil used from January 1, 2017 through December 31, 2018, by the electric generating units, complies with the requirements in subsection (d)(2), such as records from the fuel supplier indicating the sulfur content of the fuel oil;

C) On and after January 1, 2019, maintain records demonstrating that the distillate fuel oil used by the electric generating units complies with the requirements in subsection (d)(3), such as records from the fuel supplier indicating the sulfur content of the fuel oil;

D) Retain all records required by this subsection (d) for at least 5 years, and provide copies of the records to the Agency within 30 days after receipt of a request by the Agency; and

E) Notify the Agency within 30 days after discovery of deviations from any of the requirements in this subsection (d). At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations, a discussion of the possible cause of the deviations, any corrective actions taken, and any preventative measures taken.

(Source: Added at 39 Ill. Reg. 16174, effective December 7, 2015)

SUBPART O: PETROLEUM REFINING, PETROCHEMICAL AND CHEMICAL MANUFACTURING

Section 214.380 Scope

a) This Subpart contains rules which modify the general sulfur emission rules of Subparts A through M as applied to a given industry or at a given site. General rules include:

1) Subparts B through I, fuel combustion emission sources and incinerators;

2) Subparts K through M, process emission sources.

b) These rules have been grouped for the convenience of the public; the scope of each is determined by its language and history. Rules placed in this Subpart include those which appear to be primarily directed at the following major industry groups:

1) Chemicals and allied products;

2) Petroleum refining and related industries;

3) Rubber and miscellaneous plastics products.

(Source: Added and codified at 7 Ill. Reg. 13597)

Section 214.381 Sulfuric Acid Manufacturing

a) No person shall cause or allow the emission of sulfuric dioxide into the atmosphere from any new sulfuric acid manufacturing plant to exceed 4.0 pounds of sulfur dioxide per ton of acid produced (2.0 kg/Mg).

b) No person shall cause or allow the emission of sulfuric acid mist into the atmosphere from any process emission source to exceed 0.15 pounds of acid mist per ton of acid manufactured (75 g/Mg).

c) No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any sulfuric acid manufacturing process in the City of Chicago to exceed 500 ppm.

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.382 Petroleum and Petrochemical Processes

a) Section 214.301 shall not apply to existing processes designed to remove sulfur compounds from the flue gases of petroleum and petrochemical processes.

b) No person shall cause or allow the emission of more than 1,000 ppm of sulfur dioxide into the atmosphere from any new process emission source in the St. Louis (Illinois) major metropolitan area designed to remove sulfur compounds from the flue gases of petroleum and petrochemical processes.

c) The following limitations apply to any petroleum refinery in the Village of Roxana:

1) No person shall cause or allow the combustion of refinery flasher pitch containing more than 3.0% (three percent) sulfur by weight. This shall be demonstrated by daily sampling of refinery flasher pitch.

2) No person shall burn petroleum refinery fuel gas in any fuel gas combustion device if that refinery fuel gas contains more than 39 grains hydrogen sulfide per 100 dry standard cubic feet (893 mg/scm). This shall be demonstrated by sampling the refinery fuel gas once every eight hours, pursuant to the Tutwiler Procedure (Section 214.104(c)).

3) No person shall cause or allow the total emission of sulfur dioxide into the atmosphere from the following source groupings to exceed the following amounts:

A) All process heaters at distilling unit No. 1 – 459 lbs/hr (208 kg/hr).

B) All process heaters at distilling unit No. 2 – 1260 lbs/hr (571 kg/hr).

C) All gas plant process heaters – 159 lbs/hr (72.1 kg/hr).

D) All vacuum flasher unit heaters – 378 lbs/hr (171 kg/hr).

E) All process heaters at the alkylation, benzene extraction unit and catalytic feed hydrotreating units – 346 lbs/hr (157 kg/hr).

F) All boilers generating steam for general plant use – 2,400 lbs/hr (1,090 kg/hr).

G) All heaters serving the hydrocracker unit catalytic reformer No. 1, and the saturates gas plant – 1,660 lbs/hr (753 kg/hr).

H) All process heaters at the aromatics east process – 768 lbs/hr (348 kg/hr).

I) All catalytic cracking units – 3,430 lbs/hr (1,560 kg/hr).

J) All asphalt converters, distilling unit No. 1, the aromatics east process, all boilers generating steam for general plant use, and all gas plant process heaters – 2,710 lbs/hr (1,230 kg/hr).

d) Compliance with the emission limitations of subsections (b) and (c)(3) of this Section shall be demonstrated on a three-hour block average basis. Such demonstrations shall require, as a permit condition, that data as required by the Illinois Environmental Protection Agency (Section 201.161) be maintained in order to adequately determine the sulfur dioxide emission rate from each source operations group.

e) Sources in the Village of Roxana are not subject to the emission limitations of Section 214.162 when burning refinery flasher pitch or refinery fuel gas.

f) Individual process emission sources in the Village of Roxana are still subject to the emission limitation of Section 214.301 notwithstanding their inclusion in a source operations group.

g) Notwithstanding the provisions of 35 Ill. Adm. Code 201.102 of this Chapter, any

physical change in any emission source subject to subsection (b), (c), (d), or (e) of this Section which alters the height of release, temperature or volumetric flow rate of the effluent gases of such source, or alters the diameter of the exit stack, shall be deemed a modification for the purposes of 35 Ill. Adm. Code 201.142 of this Chapter.

(Source: Amended at 12 Ill. Reg. 20778, effective December 5, 1988)

Section 214.383 Chemical Manufacturing

Section 214.301 shall not apply to existing hydrogen sulfide flares at a chemical manufacturing plant provided:

a) Said flares are operative on existing batch type processes; and

b) The hydrogen sulfide emissions being flared are not, as of September 11, 1975, passed through existing processes designed to remove sulfur compounds from the flue gases as provided in Section 214.382(a); and

c) The emission of sulfur dioxide into the atmosphere from said flares does not exceed 500 pounds per hour and 3500 pounds per eight-hour period (230 kg/hr and 1590 kg/8 hrs); and

d) Provided, however, that if emission controls for said flares become economically reasonable and technically feasible the owner/operator of such hydrogen sulfide flares shall install such controls.

(Source: Amended at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.384 Sulfate and Sulfite Manufacturing

Section 214.301 shall not apply to sodium aluminum sulfate and sodium sulfite manufacturing process emission sources in the St. Louis (Illinois) major metropolitan area.

(Source: Adopted at 7 Ill. Reg. 4219, effective March 28, 1983)

SUBPART P: STONE, CLAY, GLASS AND CONCRETE PRODUCTS

Section 214.400 Scope

a) This Subpart contains rules which modify the general sulfur emission rules of Subparts A through M as applied to a given industry or at a given site. General rules include:

1) Subparts B through I, fuel combustion emission sources and incinerators;

2) Subparts K through M, process emission sources.

b) These rules have been grouped for the convenience of the public; the scope of each is determined by its language and history. Rules placed in this Subpart include those which appear to be primarily directed at the following major industry group: stone, clay, glass and concrete products.

Section 214.401 Glass Melting and Heat Treating

Section 214.301 shall not apply to:

a) Glass melting furnaces in the Chicago or St. Louis (Illinois) major metropolitan areas.

b) Glass heat treating with sulfur dioxide in the St. Louis (Illinois) major metropolitan area.

(Source: Adopted at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.402 Lime Kilns

Section 214.304 notwithstanding, lime kilns (Standard Industrial Code 32) are not subject to limitations for sulfur dioxide emission.

(Source: Adopted at 7 Ill. Reg. 4219, effective March 28, 1983)

SUBPART Q: PRIMARY AND SECONDARY METAL MANUFACTURING

Section 214.420 Scope

a) This Subpart contains rules which modify the general sulfur emission rules of Subparts A through M as applied to a given industry or at a given site. General rules include:

1) Subparts B through I, fuel combustion emission sources and incinerators;

2) Subparts K through M, process emission sources.

b) These rules have been grouped for the convenience of the public; the scope of each is determined by its language and history. Rules placed in this Subpart include those which appear to be primarily directed at the following major industry groups:

1) Primary metal industries (including primary and secondary production of

ferrous and nonferrous metals);

2) Fabricated metal products.

(Source: Added and codified at 7 Ill. Reg. 13597)

Section 214.421 Combination of Fuels at Steel Mills in Metropolitan Areas

a) Section 214.162 notwithstanding, no person shall cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from any existing fuel combustion emission source at a steel mill located in the Chicago or St. Louis (Illinois) major metropolitan area burning any solid, liquid or gaseous fuel, or any combination thereof, to exceed the allowable emission rate determined by the following equation:

$$E = S_S H_S + S_d H_d + S_R H_R + S_G H_G$$

b) Symbols in the equation mean the following:

- E = allowable sulfur dioxide emission rate;
- S_S = solid fuel sulfur dioxide emission standard which is applicable;
- S_d = distillate oil sulfur dioxide emission standard determined from the table in subsection (d);
- S_R = residual oil sulfur dioxide emission standard which is applicable;
- S_G = maximum by-product gas sulfur dioxide emissions which would result if the applicable by-product gas which was burned had been burned alone at any time during the 12 months preceding the latest operation, on or before March 28, 1983, of an emission source using any by-product gas;
- H_S = actual heat input from solid fuel;
- H_d = actual heat input from distillate fuel oil;
- H_R = actual heat input from residual fuel oil;
- H_G = actual heat input from by-product gases, such as those produced from a blast furnace.

c) That portion of the actual heat input that is derived:

1) From the burning of gaseous fuels produced by the gasification of solid fuels shall be included in H_S;

2) From the burning of gaseous fuels produced by the gasification of distillate fuel oil shall be included in H_d;

3) From the burning of gaseous fuels produced by the gasification of residual fuel oil shall be included in H_R; and

4) From the burning of gaseous fuels produced by the gasification of any other liquid fuel shall be included in H_G.

d) Metric or English units may be used in the equation of subsection (a) as follows:

Parameter	Metric	English
E	kg/hr	lbs/hr
S_S, S_R, S_G	kg/MW-hr	lbs/mmBtu
S_d prior to January 1, 2017	0.46 kg/MW-hr	0.3 lbs/mmBtu
S_d on and after January 1, 2017	0.0023 kg/MW-hr	0.0015 lb/mmBtu
H_S, H_d, H_R, H_G	MW	mmBtu

(Source: Amended at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.422 Secondary Lead Smelting in Metropolitan Areas

Section 214.301 shall not apply to secondary lead smelting process emission sources in the Chicago or St. Louis (Illinois) major metropolitan areas.

(Source: Adopted at 7 Ill. Reg. 4219, effective March 28, 1983)

Section 214.423 Slab Reheat Furnaces in St. Louis Area

Section 214.304 notwithstanding, slab reheat furnaces in the St. Louis (Illinois) major metropolitan area with fuel burning capacities in excess of 650 mmbtu/hr and burning any residual fuel shall not be subject to the applicable Subpart B through F so long as the total sulfur dioxide emissions resulting from the burning of residual fuel oil in all such furnaces at any one steel mill do not exceed 730 lbs/hr.

(Source: Adopted at 7 Ill. Reg. 4219, effective March 28, 1983)

SUBPART V: ELECTRIC POWER PLANTS

Section 214.521 Winnetka Power Plant (Repealed)

~~Notwithstanding Sections 214.101 and 214.141, the Village of Winnetka Electric Utility Plant shall not cause or allow the emission of sulfur dioxide into the atmosphere in any one hour period from its existing fuel combustion sources, burning solid fuel exclusively, to exceed 5.7 pounds of sulfur dioxide per mmbtu of actual heat input (8.8 kg/MW-hour). Compliance with this limitation shall be demonstrated on the basis of a daily average.~~

(Source: Added at 8 Ill. Reg. 6172, effective April 24, 1984)

SUBPART X: UTILITIES

Section 214.560 Scope

a) This Subpart contains rules which modify the general sulfur emission rules of Subparts A through M as applied to a given industry or at a given site. General rules include:

1) Subparts B through I: Fuel Combustion emission sources and incinerators;

2) Subparts K through M: Process emission sources.

b) These rules have been grouped for the convenience of the public; the scope of each is determined by its language and history. Rules placed in this Subpart include those which appear to be primarily directed at the following major industry groups: electric, gas and sanitary services.

(Source: Added at 10 Ill. Reg. 9806, effective May 20, 1986)

Section 214.561 E. D. Edwards Electric Generating Station (Repealed)

~~Sulfur dioxide emissions from Boiler Nos. 1, 2, and 3 at the Edwards Station may not exceed the limits listed in this Section. CILCO must determine compliance with these limits on a daily basis using the sulfur dioxide methodology of the Phase II Acid Rain Program set forth in 40 CFR 75.~~

~~a) The average sulfur dioxide emissions from Boiler Nos. 1, 2, and 3, as a group may not exceed 4.71 pounds per million British thermal units (lb/mmBtu) of actual heat input;~~

~~b) The average sulfur dioxide emissions from any one boiler may not exceed 6.6 lb/mmBtu of actual heat input; and~~

~~c) Sulfur dioxide emissions for all three boilers, as a group, may not exceed 34,613 pounds per hour, on a 24-hour average basis.~~

(Source: Amended at 27 Ill. Reg. 12101, effective July 11, 2003)

Section 214.562 Coffeen Generating Station

a) The emission standards of this subsection shall apply only if the requirements of subsections (b), (c), and (d) are fulfilled. Notwithstanding any other limitation contained in this Part, whenever the coal burned is mined exclusively from the mine that is presently known as Monterey Coal Company's No. 1 Mine located south of Carlinville, emission of sulfur dioxide from Units 1 and 2 at the Central Illinois Public Service Company's (CIPS) Coffeen Generating Station (Coffeen), located in Montgomery County, shall not exceed either of the following emission standards:

1) 29,572 kilograms of sulfur dioxide in any one hour (65,194 lbs/hr); and

2) 11.29 kilograms of sulfur dioxide per megawatt-hour of heat input (7.29 lbs/mmbtu).

b) CIPS shall conduct an ambient sulfur dioxide monitoring and dispersion modeling program designed to demonstrate that the emission standards of subsection (a) will not cause or contribute to violations of any applicable primary or secondary sulfur dioxide ambient air quality standard as set forth in Section 243.122. Such ambient monitoring and dispersion modeling program shall be operated for at least one year commencing no later than 6 months after Coffeen is legally able and begins to operate at an emission rate greater than 55,555 pounds of sulfur dioxide per hour.

c) No more than 15 months after the commencement of the ambient monitoring and dispersion modeling program of subsection (b), CIPS shall apply for a new operating permit. CIPS shall submit to the Environmental Protection Agency (Agency), at the time of the application, a report containing the results of the ambient monitoring and dispersion modeling program of subsection (b) and the results of all relevant stack tests conducted prior to the report's submission.

d) No later than six months after Coffeen is legally able and begins to operate at an emission rate greater than 55,555 pounds of sulfur dioxide per hour, a stack test shall be conducted in accordance with Section 214.101(a), in order to determine compliance with emission standards set forth in subsection (a). After the stack test is conducted, the results shall be submitted to the Agency within 90 days. The requirements of this subsection do not preclude the Agency from requiring additional stack tests.

(Source: Added at 12 Ill. Reg. 17387, effective October 14, 1988)

SUBPART AA: REQUIREMENTS FOR CERTAIN SO_2 SOURCES

Section 214.600 Definitions

For purposes of this Subpart, the following definitions apply. Unless a different meaning for a term is clear from its context, all terms not defined in this Section have the meanings given to them in the Illinois Environmental Protection Act and in 35 Ill. Adm. Code 201 and 211.

"Agency" means the Illinois Environmental Protection Agency.

"Aventine Renewable Energy" means the ethanol production source located at or near 1300 S. 2nd Street, Pekin IL.

"Illinois Power Resources Generating E.D. Edwards" means the electrical power generation source located at or near 7800 S. Cilco Lane, Bartonville IL.

"Ingredion Bedford Park" means the corn wet milling source located at or near 6400 S. Archer Road, Bedford Park IL.

"Midwest Generation Joliet" means the electrical power generation source located at or near 1800 Channahon Road, Joliet IL.

"Midwest Generation Powerton" means the electrical power generation source located at or near 13082 E. Manito Road, Pekin IL.

"Midwest Generation Will County" means the electrical power generation source located at or near 529 E. 135th, Romeoville IL.

"Owens Corning" means the asphalt and roofing products manufacturing source located at or near 5824 S. Archer Road, Summit IL.

"Oxbow Midwest Calcining" means the petroleum coke product source located at or near 12308 S. New Avenue, Lemont IL.

(Source: Added at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.601 Applicability

a) This Subpart applies to the following sources:

1) Aventine Renewable Energy;

2) Illinois Power Resources Generating E.D. Edwards;

3) Ingredion Bedford Park;

4) Midwest Generation Joliet;

5) Midwest Generation Powerton;

6) Midwest Generation Will County;

7) Owens Corning; and

8) Oxbow Midwest Calcining.

b) Once a source is subject to this Subpart, it is always subject to this Subpart, regardless of change in ownership or unit designation, or any other modification at the source.

c) Nothing in this Subpart relieves a source of the obligation to comply with the air quality standards set forth in 35 Ill. Adm. Code 243, or with any other applicable requirement set forth in this Part.

(Source: Added at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.602 Compliance Deadline

On and after January 1, 2017, the owner or operator of a source identified in Section 214.601(a) must comply with the provisions in this Subpart.

(Source: Added at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.603 Emission Limitations

The owner or operator of a source must comply with the following emission limitations, as applicable, expressed in terms of pounds of SO_2 emitted per clock hour.

a)	Aventine Renewable Energy		lb/hr
	1)	Cyclone East controlling First Germ Drying System	0.27
	2)	Cyclone West controlling First Germ Drying System	0.37
	3)	Second Germ Drying System	0.01
	4)	Gluten Dryer 4	3.12
	5)	Gluten Dryer 9	10.50
	6)	Germ Dryer 1	4.98
	7)	Germ Dryer 3	4.26
	8)	Yeast Dryer	1.50
	9)	Scrubber controlling Steep Acid Tower	1.79
	10)	Biogas Flare	0.001
	11)	Boiler A	0.00

	12)	Boiler B	0.00
	13)	Boiler C	0.00
b)	Illinois Power Resources Generating E.D. Edwards		lb/hr
	1)	Units 1 and 2 combined	2100.00
	2)	Unit 3	2756.00
	3)	Unit 3, if both Units 1 and 2 permanently shut down	4000.00
c)	Ingredion Bedford Park		lb/hr
	1)	Feed Transport System	24.38
	2)	Wet Milling: Inside In-Process Tanks	107.26
	3)	Wet Milling: Molten Sulfur Burner and Absorption System	7.01
	4)	Wet Milling: Outside In-Process Tanks	2.69
	5)	Germ Processing Facility Channel 1 System	13.36
	6)	Germ Processing Facility Channel 2 System	7.07
	7)	Germ Processing Facility Channel 3 System	7.07
	8)	Germ Processing Facility Channel 4 System	7.07
d)	Midwest Generation Joliet		lb/hr
	1)	Joliet 9: Unit 6	189.82
	2)	Joliet 29: Unit 7	323.29
	3)	Joliet 29: Unit 8	342.15

e) Midwest Generation Powerton — lb/hr

1) Boilers 51, 52 (Unit 5) and 61, 62 (Unit 6) combined — 3452.00

2) The owner or operator must comply with the emission limitation set forth in subsection (e)(1) on a 30-operating day rolling average basis. For purposes of this Subpart, an operating day is a calendar day in which any emission unit addressed in subsection (e)(1) combusts any fuel;

3) Within 24 hours after the end of each averaging period, the owner or operator must use the following equation to determine the combined SO_2 emission rate of the emission units addressed in subsection (e)(1) for each averaging period, which concludes at the end of each operating day. The SO_2 emission rate must not exceed the limitation set forth in subsection (e)(1):

$$E_{avg} = \frac{\sum_{h=1}^{n} E_h}{n}$$

Where:

E_{avg} = SO_2 emission rate for the averaging period, in lb/hr.

E_h = SO_2 emission rate for stack operating hour "h" in the averaging period. For purposes of this Subpart, a stack operating hour is a clock hour in which valid data is obtained, and in which gases flow through the monitored stack or duct for the emission units addressed in subsection (e)(1) (either for part of the hour or for the entire hour) while at least one of the units is combusting fuel.

n = Number of stack operating hours in the averaging period in which valid data is obtained.

4) The SO_2 emission rate for the emission units addressed in subsection (e)(1) must not exceed 6,000 lb/hr in more than 5% of the stack operating hours ("n" in the equation in subsection (e)(3)) in any averaging period.

f) Midwest Generation Will County — lb/hr

1) Unit 3 — 145.14

2) Unit 4 — 5000.00

g)	Owens Corning		lb/hr
	1)	Preheater Incinerator System 1, including emissions from: Storage Tanks 9, 9A, 10, 10A, 11, 17, 18, 19, 20, 40, 41, 42, and 43; Loading Racks 1, 2, and 9; and Convertors 10 and 11	44.69
	2)	Preheater Incinerator System 3, including emissions from: Converters 8, 9, 12, 13, 14, and 15; and Loading Racks 1, 2, and 9	27.23
	3)	Regenerative Thermal Oxidizer 3 controlling: Storage Tanks 27, 28, 31, 32, 33, 34, 35, and 36	4.33
	4)	Regenerative Thermal Oxidizer 4 controlling: Storage Tank 98; Loading Rack PV1	6.38
	5)	Coating Operations combined	0.15
h)	Oxbow Midwest Calcining		lb/hr
	All Calcining Units combined		187.00

(Source: Added at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.604 Monitoring and Testing

a) The owner or operator of a source must, for each emission unit at the source that is addressed in Section 214.603, demonstrate compliance with the applicable emission limitations in Section 214.603 via the monitoring and testing requirements set forth in this Section.

b) The owners or operators of the following sources must, for each emission unit at the source that is addressed in Section 214.603, install, calibrate, maintain, and operate a continuous emissions monitoring system for the measurement of SO_2 emissions in accordance with 40 CFR 75 (except 40 CFR 75.31 through 34), incorporated by reference in Section 214.104, and subsection (d), or utilize an alternative monitoring method available to the emission unit under 40 CFR 75:

1) Illinois Power Resources Generating E.D. Edwards;

2) Midwest Generation Joliet;

3) Midwest Generation Powerton; and

4) Midwest Generation Will County.

c) The owner or operator of all sources not addressed in subsection (b) must, for each emission unit at the source that is addressed in Section 214.603, either conduct performance testing in accordance with subsection (e) or install, calibrate, maintain, and operate a continuous emissions monitoring system for the measurement of SO_2 emissions in accordance with 40 CFR 60 or 40 CFR 75 (except 40 CFR 75.31 through 34), incorporated by reference in Section 214.104, and subsection (d) of this Section.

d) The owner or operator of a source with an emission unit demonstrating compliance through the use of a continuous emissions monitoring system must comply with the following for each unit:

1) If two or more of the emission units addressed in Section 214.603 are served by a common stack, the owner or operator may utilize a single continuous emissions monitoring system for those units;

2) If the owner or operator of an emission unit subject to Section 214.604(c) changes the method of demonstrating compliance for that unit from performance testing to use of a continuous emissions monitoring system, the owner or operator must install, calibrate, and begin operating the continuous emissions monitoring system on or before the performance testing deadline determined in accordance with subsection (e)(2); and

3) The provisions in 40 CFR 75.31 through 34 regarding missing data substitution must not be used for purposes of demonstrating compliance with the requirements set forth in this Subpart.

e) The owner or operator of a source with an emission unit demonstrating compliance through performance testing must comply with the following for each unit. All testing done pursuant to this Section must be conducted at the owner's or operator's own expense:

1) Conduct an initial performance test after January 1, 2015 and prior to January 1, 2017. If the owner or operator of an emission unit subject to Section 214.604(c) changes the method of demonstrating compliance for that unit from use of a continuous emissions monitoring system to performance testing, the owner or operator must demonstrate compliance by conducting an initial performance test prior to discontinuing the continuous emissions monitoring system;

2) Conduct subsequent performance tests at least once every 5 years from the date of the last performance test. The date of the initial performance test conducted pursuant to subsection (e)(1) begins the 5-year period;

3) Conduct additional performance testing when, in the opinion of the Agency or USEPA, that testing is necessary to demonstrate compliance with the requirements in Section 214.603. The test must be conducted within 90 days after receipt of a notice to test from the Agency or USEPA, unless the notice specifies an alternative testing deadline;

4) Submit a testing protocol as described in USEPA's Emission Measurement Center Guideline Document (GD-042), incorporated by reference in Section 214.104, to the Agency at least 45 days prior to a scheduled emissions test, unless that deadline is waived in writing by the Agency;

5) Submit a written notification of a scheduled emissions test to the Agency at least 30 days prior to the test date and again 5 days prior to testing, unless those deadlines are waived in writing by the Agency. If, after the 30 days' notice of a test is sent, there is a delay in conducting the test as scheduled (e.g., due to operational problems), the owner or operator must notify the Agency as soon as practicable of the delay, either by providing at least 7 days' notice of the rescheduled test date or by arranging a new test date with the Agency by mutual agreement;

6) Conduct each performance test using Method 1, 2, 3, 4, 6, 6A, 6B, 6C, or 19, incorporated by reference in Section 214.104, or other alternative USEPA methods approved by the Agency. Each test must consist of at least 3 separate runs, each lasting a minimum of 60 minutes, and must be conducted during conditions representative of maximum SO_2 emissions. Compliance with the applicable limitation in Section 214.603 must be determined in accordance with 35 Ill. Adm. Code 283;

7) If the unit has combusted more than one type of fuel in the prior year, a separate performance test is required for each fuel; and

8) Subsequent to each performance test used to demonstrate compliance, continue operating the emission unit within the parameters enumerated in the testing results submitted to the Agency for each test, and monitor the parameters regularly to ensure ongoing compliance.

(Source: Added at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.605 Recordkeeping and Reporting

a) By January 1, 2017, the owner or operator of a source must submit to the Agency the following:

1) A certification that the source will be in compliance with the provisions in this Subpart by January 1, 2017;

2) For a source with an emission unit demonstrating compliance through performance testing:

A) The results of the initial performance test conducted pursuant to Section 214.604(e)(1);

B) The calculations necessary to demonstrate that the emission unit will be in initial compliance; and

C) A description of the measures the source will take to ensure the emission unit continues to operate within the parameters enumerated in the testing results submitted to the Agency for each test used to demonstrate compliance, including how those parameters will ensure ongoing compliance with the applicable limitation in Section 214.603 and the specific monitoring procedures that will be implemented for each parameter;

3) For a source with an emission unit demonstrating compliance through the use of a continuous emissions monitoring system, a certification of the installation and operation of the continuous emissions monitoring system and the monitoring data necessary to demonstrate that the emission unit will be in initial compliance;

4) For a source with an emission unit demonstrating compliance through the use of an alternative monitoring method under 40 CFR 75, a description of the alternative monitoring method being used and the monitoring data necessary to demonstrate that the emission unit will be in initial compliance; and

5) A description of the method or methods the source will use to comply with all applicable emission limitations in Section 214.603, including a description of all control devices used and, for sources with emission units demonstrating compliance through performance testing, the operating parameters for those devices.

b) The owner or operator of a source must keep and maintain records that demonstrate ongoing compliance with the requirements of this Subpart. The records must include the following:

1) The calendar date of the record;

2) Reports for all performance tests conducted pursuant to Section 214.604(e), including the date of the test and the results;

3) A log of the date, time, nature, and results of all parametric monitoring conducted pursuant to Section 214.604(e)(8);

4) For each SO_2 continuous emissions monitoring system, a log indicating any periods when the device was not in service, maintenance and inspection activities performed on the device, and all information necessary to demonstrate compliance with the monitoring requirements in Section 214.604;

5) The date, time, and duration of any malfunction in the operation of an emission unit addressed in Section 214.603 or any SO_2 control equipment for that unit, if the malfunction causes an exceedance of any applicable emission limitation in Section 214.603, and the date, time, and duration of any malfunction in the operation of any SO_2 emissions monitoring equipment for that unit. 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;

6) A log of all inspections, cleaning, maintenance, and repair activities performed on SO_2 control equipment for an emission unit addressed in Section 214.603, including the date and nature of those activities. The log must indicate any changes made to the control equipment, including removal or replacement of the equipment; and

7) For emission units subject to the emission limitation in Section 214.603(e), the SO_2 emission rate of the units for each averaging period and supporting calculations.

c) Except as otherwise indicated in this Subpart, the owner or operator of a source with an emission unit demonstrating compliance through performance testing must submit the results of all tests conducted pursuant to Section 214.604(e) within 60 days after completion of the test.

d) The owner or operator of a source must notify the Agency at least 30 days prior to changing the method of demonstrating compliance for an emission unit addressed in Section 214.603. The owner or operator must also comply with the following, as applicable:

1) For an emission unit changing the method of demonstrating compliance from performance testing to use of a continuous emissions monitoring system, submit to the Agency a certification of the installation and operation of the continuous emissions monitoring system and the

monitoring data necessary to demonstrate compliance. The submittal must be made within 30 days after beginning operation of the continuous emissions monitoring system, and on or before the performance testing deadline determined in accordance with Section 214.604(e)(2);

2) For an emission unit changing the method of demonstrating compliance from use of a continuous emissions monitoring system to performance testing, submit to the Agency the following. The submittal must be made prior to discontinuing operation of the continuous emissions monitoring system:

A) The results of the initial performance test conducted pursuant to Section 214.604(e)(1);

B) The calculations necessary to demonstrate compliance; and

C) A description of the measures the source will take to ensure the emission unit continues to operate within the parameters enumerated in the testing results submitted to the Agency for each test used to demonstrate compliance, including how the parameters will ensure ongoing compliance with the applicable limitation in Section 214.603 and the specific monitoring procedures that will be implemented for each parameter;

3) For an emission unit changing the method of demonstrating compliance from use of a continuous emissions monitoring system to an alternative monitoring method under 40 CFR 75, submit to the Agency a description of the alternative monitoring method being used and the monitoring data necessary to demonstrate compliance. The submittal must be made prior to discontinuing operation of the continuous emissions monitoring system.

e) The owner or operator of a source must notify the Agency within 30 days after discovery of deviations from any of the requirements in this Subpart or any exceedance of an applicable emission limitation in Section 214.603. At minimum, and in addition to any permitting obligations, the notification must include a description of the deviations or exceedances, a discussion of the possible cause of the deviations or exceedances, any corrective actions taken, and any preventative measures taken.

f) The owner or operator of a source must maintain all records required by this Section at the source for a minimum of 5 years, and provide copies of the records to the Agency within 30 days after receipt of a request by the Agency.

(Source: Added at 39 Ill. Reg. 16174, effective December 7, 2015)

Section 214.**APPENDIX A Rule into Section Table**

R80-22	Old Chapter 2	Part 214
204(a)	204(a)	214.121
204(b)	204(b)	214.122
204(c)	204(c)(1)(B)	214.142
204(d)	204(c)(1)(C)	214.143
204(e)(intro)	204(e)(intro)	214.182
204(e)(1)	204(e)(1)	214.183, Appendix C
204(e)(2)	204(e)(2)	214.184
204(e)(3)	204(e)(3)	214.185
204(e)(4)	204(e)(4)	214.186
204(f)(intro)	204(c)(1)(A)	214.141
204(f)(1)	–	214.141(a)
204(f)(2)	–	214.141(b)
204(g)	–	214.201
204(h)	204(c)(2)(A) and (B)	214.161
204(i)(1)	204(d)	214.162
204(i)(2)	–	214.421
204(j)(intro)	–	214.304
204(j)(l)	–	214.423
204(j)(2)	–	214.304
204(j)(3)	–	214.402
204(k)(intro)	204(f)(1)(A)	214.301
204(k)(1)(A)	204(f)(1)(C)	214.302
204(k)(1)(B)	204(f)(1)(D)	214.382(a)
204(k)(1)(C)	204(f)(1)(E)	214.383
204(k)(1)(D)	–	214.384(a)
204(k)(1)(E)	–	214.384(b)
204(k)(1)(F)	–	214.422
204(k)(1)(G)	–	214.401(a)
204(k)(1)(H)	–	214.401(b)
204(k)(2)	–	214.382(b)
204(k)(3)	–	214.381(c)
204(k)(4)	204(f)(1)(B)	214.381(a)
204(l)(1)	204(f)(2)(A)	214.381(b)
204(l)(2)	204(f)(2)(B)	214.303
204(m)	204(g)	214.101
204(n)	204(n)	Appendix D
204(o)	204(i)	214.181, 212.202

Section 214.APPENDIX B Section into Rule Table

Part 214	Old Chapter 2	R80-22
214.100	–	Added in Codification

214.101	204(g)	204(m)
214.102	–	Added in Codification
214.103	–	Added in Codification
214.104	–	Added in Codification
214.120	–	Added in Codification
214.121	204(a)	204(a)
214.122	204(b)	204(b)
214.141	204(c)(1)(A)	204(f)
214.142	204(c)(1)(B)	204(c)
214.143	204(c)(1)(C)	204(d)
214.161	204(c)(2)(A)&(B)	204(h)
214.162	204(d)	204(i)(1)
214.181	204(i)	204(o)
214.182	204(e)(intro)	204(e)(intro)
214.183	204(e)(1)	204(e)(1)
214.184	204(e)(2)	204(e)(2)
214.185	204(e)(3)	204(e)(3)
214.186	–	204(e)(4)
214.201	–	204(g)
214.202	–	204(o)
214.300	–	Added in Codification
214.301	204(f)(1)(A)	204(k)(intro)
214.302	204(f)(1)(C)	204(k)(1)(A)
214.303	204(f)(2)(B)	204(l)(2)
214.304	–	204(j)(intro)&(2)
214.380	–	Added in Codification
214.381(a)	204(f)(1)(B)	204(k)(4)
214.381(b)	204(f)(2)(A)	204(l)(1)
214.381(c)	–	204(k)(3)
214.382(a)	204(f)(1)(D)	204(k)(1)(B)
214.382(b)	–	204(k)(2)
214.383	204(f)(1)(E)	204(k)(1)(C)
214.384	–	204(k)(1)(D)&(E)
214.400	–	Added in Codification
214.401	–	204(k)(1)(G)&(H)
214.402	–	204(j)(3)
214.420	–	Added in Codification
214.421	–	204(i)(2)
214.422	–	204(k)(1)(F)
214.423	–	204(j)(1)

Part 214	Old Chapter 2	R80-22
Appendix A	–	Added in Codification
Appendix B	–	Added in Codification
Appendix C	204(e)(1)	204(e)(1)
Appendix D	204(n)	204(n)

1886
1887

Section 214.APPENDIX C Method used to Determine Average Actual Stack Height and Effective Height of Effluent Release

Q	=	Heat emission rate (in btu/sec or Kcal/sec as determined by method outlined below.
ΔH	=	Plume rise (in feet or meters).
H	=	Physical height (in feet or meters) above grade of each stack, except that for purposes of this calculation the value used for such stack height shall not exceed good engineering practice as defined by Section 123 of the Clean Air Act and Regulations promulgated thereunder, unless the owner or operator of the source demonstrates to the Agency that a greater height is necessary to prevent downwash or fumigation conditions.
T	=	Exit temperature of stack gases (in degrees Rankine or degrees Kelvin) from each source during operating conditions which would cause maximum emissions.
V	=	Exit velocity of stack gases (in feet/sec or meters/sec from each source under operating conditions which would cause maximum emissions.
D	=	Diameter of stack (in feet or meters).
P	=	Percentage of total emissions expressed as decimal equivalents emitted from each source. (Example: 21% = 0.21.) NOTE: The sum of $P_1 + P_2 \ldots + P_n = 1$. The emission values to be used are those which occur during operating conditions which would cause maximum emissions.
H_A	=	Average actual stack height (in feet or meters).
H_E	=	Effective height of effluent release (in feet or meters).

STEP 1: Determine weighted average stack parameters utilizing the following formulae:

$$D = P_1 D_1 + P_2 D_2 + \ldots + P_n D_n$$

$$V = P_1 V_1 + P_2 V_2 + \ldots + P_n V_n$$

$$T = P_1 T_1 + P_2 T_2 + \ldots + P_n T_n$$

$$H_A = P_1 H_1 + P_2 H_2 + \ldots + P_n H_n$$

NOTE:

P_1, D_1, V_1, T_1, and H_1 are the percentage of total emissions, stack diameter, exit velocity of gases, exit temperature of stack gases, and physical stack height, respectively, for the first source; P_2, D_2, V_2, T_2, and H_2 are the respective values for the second source; similarly, P_n, D_n, V_n, T_n, and H_n are the respective values for the nth source, where n is the number of the last source.

STEP 2: Calculate heat emission rate utilizing the following formula and the weighted average stack parameters obtained in Step 1:

$$Q_H = 7.54 D^2 V \frac{(T-515)}{T} \quad \text{(in English units)}$$

$$Q_H = 66.8 D^2 V \frac{(T-286)}{T} \quad \text{(in Metric units)}$$

STEP 3: Calculate plume rise utilizing the appropriate formula given below and the total heat emission rate obtained in Step 2:

$$\Delta H = \frac{2.58 (Q_H)^{0.6}}{(H_A)^{0.11}} \quad \text{(in English units for } Q_H \geq 6000 \text{ btu/sec)}$$

$$\Delta H = \frac{1.58 (Q_H)^{0.6}}{(H_A)^{0.11}} \quad \text{(in Metric units for } Q_H \geq 1500 \text{ kcal/sec)}$$

$$\Delta H = \frac{0.718 (Q_H)^{0.75}}{(H_A)^{0.11}} \quad \text{(in English units for } Q_H < 6000 \text{ btu/sec)}$$

$$\Delta H = \frac{0.54 (Q_H)^{0.75}}{(H_A)^{0.11}} \quad \text{(in Metric units for } Q_H < 1500 \text{ kcal/sec)}$$

STEP 4: Calculate the weighted average facility effective height of effluent release utilizing the plume rise obtained in Step 3, the average stack height obtained in Step 1, and the formula given below:

$$H_E = H_A + \Delta H$$

STEP 5: Calculate the total facility hourly emission limitation utilizing the weighted actual stack height obtained in Step 1, the effective stack height given in Step 4, and the following formula:

$$E = \frac{(H_A)^{0.11} (H_E)^2}{\quad} \quad \text{(in English units)}$$

$$E = 0.04347(H_A)^{0.11} (H_E)^2 \quad \text{(in Metric units)}$$

(Source: Amended at 30 Ill. Reg. 9671, effective May 15, 2006)

Section 214. APPENDIX D Past Compliance Dates

Rule	Type of Source	Compliance Date
204(b)	New fuel combustion emission sources.	April 14, 1972
204(c)	St. Louis (Illinois) and Peoria MMA's with actual heat input less than, or equal to, 250 million Btu per hour	
	(a) Sources determining that the 6.8 lbs/MMBTU standard shall apply	December 14, 1978
	(b) Sources determining that Rule 204(e) shall apply	See Rule 204(e)
204(d)	Existing sources outside the Chicago, St. Louis (Illinois) and Peoria MMA's with actual heat input greater than 250 million Btu per hour	See Rule 204(e)
204(e)(1) and (2)	Fuel combustion sources located outside Chicago, St. Louis (Illinois) and Peoria MMA's which obtain an alternate emission rate	December 14, 1978
	(a) If source is in compliance with the previous Rule 204(e) (effective April 14, 1972 until December 14, 1978) prior to December 14, 1978	Date of commencement of monitoring and modeling pursuant to Rule 204(e)(3)(C)
	(b) If source is not in compliance with the previous Rule 204(e) (effective from April 14, 1972 until December 14, 1978) prior to December 14, 1978	Date of approval of alternate standard
204(f)	Existing sources in the Chicago, St. Louis (Illinois) or Peoria MMA's burning solid fuel exclusively burning solid fuel exclusively which obtain an alternate emission rate	March 28, 1983
204(g)	Existing sources in the Chicago, St. Louis (Illinois) or Peoria MMA's burning solid fuel exclusively which obtain an alternate	Date of approval of alternate standard

	emission rate	
204(h)	Existing sources burning liquid fuel exclusively	May 30, 1975
204(i)	Combination of fuels sources except at a steel mill	April 14, 1972
	Combination of fuels sources at a steel mill	March 28, 1983
204(j)	Fuel burning process emission sources	March 28, 1983
204(k)(1) (a)-(C)	Process emission sources	
	Existing sources	December 31, 1973
	New sources	December 14, 1978
204(k)(1) (D)-(H)	Process emission sources	March 28, 1983
204(k)(2) and (3)	New sources in the St. Louis (Illinois) MMA designed to remove sulfur compounds from the flue gases of petroleum and petrochemical processes and sulfuric acid manufacturing processes in the City of Chicago	March 28, 1983
204(l)	Sources having emissions of sulfuric acid mist	
	Existing sources	December 31, 1973
	New sources	December 14, 1978

1927
1928