BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	
NITROGEN OXIDES EMISSIONS FROM	)	R08-19
VARIOUS SOURCE CATEGORIES:	)	(Rulemaking – Air)
AMENDMENTS TO 35 ILL. ADM. CODE	)	
PARTS 211 AND 217	)	

NOTICE

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

SEE ATTACHED SERVICE LIST

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board the SECOND MOTION TO AMEND RULEMAKING PROPOSAL and POST-HEARING COMMENTS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, a copy of which is herewith served upon you.

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: _____
Gina Roccaforte
Assistant Counsel
Division of Legal Counsel

DATED: March 23, 2009

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

THIS FILING IS SUBMITTED ON RECYCLED PAPER

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	
NITROGEN OXIDES EMISSIONS FROM	)	R08-19
VARIOUS SOURCE CATEGORIES:	)	(Rulemaking – Air)
AMENDMENTS TO 35 ILL. ADM. CODE	)	
PARTS 211 AND 217	)	

SECOND MOTION TO AMEND RULEMAKING PROPOSAL

NOW COMES the Proponent, the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY ("Illinois EPA" or "Agency"), by its attorneys, and pursuant to 35 Ill. Adm. Code 101.500 and 102.402, moves that the Illinois Pollution Control Board ("Board") amend this rulemaking proposal that includes amendments to 35 Ill. Adm. Code Parts 211 and 217. In support of its Motion, the Illinois EPA states as follows:

On May 9, 2008, the Illinois EPA filed a proposal with the Board to amend 35 Ill. Adm. Code Parts 211 and 217 to control the emissions of nitrogen oxides ("NO_x") from various source categories such as industrial boilers, process heaters, glass melting furnaces, cement kilns, lime kilns, furnaces used in steel making and aluminum melting, and fossil fuel-fired stationary boilers. This proposed rulemaking is intended to meet certain obligations of the State of Illinois under the federal Clean Air Act ("CAA"), 42 U.S.C. § 7401 *et seq.*; specifically, to satisfy Illinois' obligation to submit a State Implementation Plan to address the requirements under Sections 172 and 182 of the CAA for major stationary sources of NO_x in areas designated as nonattainment with respect to National Ambient Air Quality Standards. *See*, 42 U.S.C. §§ 7502 and 7511a. The Board held hearings on this proposal on October 14, 2008, in Springfield, on December 9 and 10, 2008, in Chicago, and on February 3, 2009, in Edwardsville.

Since the last hearing, the Illinois EPA has continued to engage in negotiations with interested parties on remaining unresolved issues. Such negotiations with ConocoPhillips Company, United States Steel Corporation, and ArcelorMittal USA, Inc., have led to the further

agreed revisions of certain provisions. The amendments set forth in this motion will memorialize those agreements and resolve issues related to the described subject matter.

Specifically, in response to comments by the United States Environmental Protection Agency, under the applicability provisions, so as to determine applicability, the term "potential to emit" has been defined for this proposal as the amount of NO_x that can potentially be emitted from emission units at sources on an uncontrolled basis over the year. Additional amendatory provisions state that the owner or operator of emission units subject to Subpart D or E of Part 217 and located at a petroleum refinery must comply with the requirements of Subpart D or E of Part 217 as applicable, beginning January 1, 2012, except that the owner or operator of emission units listed in a new appendix, Appendix H, must comply with the requirements of Subpart C, including the option of demonstrating compliance with the applicable Subpart through an emissions averaging plan under Section 217.158, and Subpart D or E, as applicable, for the listed emission units beginning on the dates set forth in Appendix H. In addition, with Agency approval, the owner or operator of emission units listed in Appendix H may elect to comply with the requirements of Subpart C and Subpart D or E, as applicable, by reducing the emissions of emission units other than those listed in Appendix H, provided that the emissions limitations of such other emission units are equal to or more stringent than the applicable emissions limitations set forth in Subpart D or E, as applicable, by the dates set forth in Appendix H.

Under Section 217.156, the recordkeeping and reporting requirement as it pertains to performance testing has been amended to apply to all performance testing conducted under Section 217.157 and not just certain testing as under the original proposal. Under Section 217.157, the provisions applicable to the installation of continuous emissions monitoring systems ("CEMS") have also been amended to allow for additional time to install such CEMS. In addition, provisions have been added to allow for a predictive emission monitoring system, in

accordance with 40 CFR Part 60, Subpart A, and Appendix B, Performance Specification 16, as an alternative to the CEMS requirements for the owners or operators of certain emission units who are not otherwise required by any another statute, regulation, or enforceable order to install a CEMS on an emission unit. Additional time is also provided to install a predictive emissions monitoring system ("PEMS"), similar to the CEMS provisions.

Provisions are also being proposed to more clearly describe the types of "replacement units" that may be included in an emissions averaging plan under Section 217.158. The new unit must be used for the same purpose and have substantially equivalent or less process capacity or be permitted for less NO_x emissions on an annual basis than the actual NO_x emissions of the unit or units that are replaced. In addition, within 90 days after permanently shutting down a unit that is replaced, the owner or operator of such unit must submit a written request to withdraw or amend the applicable permit to reflect that the unit is no longer in service before the replacement unit may be included in an emissions averaging plan. Also, under the emissions averaging plan provisions under Section 217.158, the provision under subsection (a)(2)(C) describing certain units that may not be included in an emissions averaging plan has been slightly modified to exclude units that are required to meet emission limits or control requirements for NO_x as provided for in an enforceable order, unless such order allows for emissions averaging. Nothing in that subparagraph is intended to prohibit a petroleum refinery from including industrial boilers or process heaters, or both, in an emissions averaging plan where an enforceable order does not prohibit the reductions made under such order from also being used for compliance with any rules or regulations designed to address regional haze or the non-attainment status of any area.

Furthermore, under Section 217.158, provisions have been added to allow the owner or operator of an emission unit located at a petroleum refinery who is demonstrating compliance with an applicable Subpart through an emissions averaging plan to exclude from the calculation

demonstrating compliance those time periods when an emission unit included in the emissions averaging plan is shut down for a maintenance turnaround, provided that such owner or operator notify the Agency in writing at least 30 days in advance of the shutdown of the emission unit for the maintenance turnaround and the shutdown of the emission unit does not exceed 45 days per ozone season or calendar year and NO_x pollution control equipment, if any, continues to operate on all other emission units operating during the maintenance turnaround. Similar provisions were also added to allow the owner or operator of an emission unit that combusts a combination of coke oven gas and other gaseous fuels and located at a source that manufactures iron and steel who is demonstrating compliance with an applicable Subpart through an emissions averaging plan to exclude from the calculation demonstrating compliance those time periods when the coke oven gas desulfurization unit included in the emissions averaging plan is shut down for maintenance, provided that such owner or operator notify the Agency in writing at least 30 days in advance of the shutdown of the coke oven gas desulfurization unit for maintenance and such shutdown does not exceed 35 days per ozone season or calendar year and NO_x pollution control equipment, if any, continues to operate on all other emission units operating during the maintenance period.

The emissions limitation for an industrial boiler, circulating fluidized bed combustor, with a rated heat input capacity greater than 100 mmBtu/hr has been changed from 0.10 lb/mmBtu to 0.12 lb/mmBtu under Subpart D. During discussions with affected parties, emissions information from an existing source with such a unit was provided to the Illinois EPA, and such information necessitated a modification of the emissions limitation. In addition, a formula has been added to allow for an emissions limitation to be calculated for an industrial boiler combusting a combination of natural gas, coke oven gas, and blast furnace gas under Subpart D.

In addition, the emissions limitation for a process heater with a rated heat input capacity greater than 100 mmBtu/hr combusting natural gas or other gaseous fuels has been amended from 0.07 lb/mmBtu to 0.08 lb/mmBtu under Subpart E. Furthermore, the emissions limitation for a recuperative reheat furnace combusting natural gas has been changed from 0.05 lb/mmBtu to 0.09 lb/mmBtu under Subpart H. Additionally, an emissions limitation has been added for a recuperative reheat furnace combusting a combination of natural gas and coke oven gas under Subpart H.

A new appendix to Part 217, Appendix H, is being proposed to set forth the compliance dates for certain emission units at petroleum refineries. This Appendix is referenced in Section 217.152, as described above.

Two additional minor amendments are also the subject of this Motion. First, under Section 211.3100, the definition of the term "industrial boiler" has been amended to include the exclusion pertaining to "a heat recovery steam generator that captures waste heat from a combustion turbine." This change was proposed by the Illinois EPA in the Post-Hearing Comments of the Illinois EPA that were filed with the Board on November 5, 2008, but was inadvertently not included in the Illinois EPA's Motion to Amend Rulemaking Proposal that was filed with the Board on January 30, 2009, and subsequently granted by the Board on February 19, 2009. Second, under Section 217.160(c), the modifying commencement of operation date of January 1, 2008, has been removed in the non-applicability provisions pertaining to certain fluidized catalytic cracking units located at a petroleum refinery.

Therefore, the Illinois EPA is now proposing to amend the rulemaking proposal as set forth in this Motion. Accordingly, the Illinois EPA recommends the acceptance by the Board of the following amendments to the rulemaking proposal:

1. *Amend Section 211.3100 to read as follows:*

Section 211.3100 Industrial Boiler

"Industrial boiler" means, for purposes of Part 217, an enclosed vessel in which water is heated and circulated either as hot water or as steam for heating or for power, or both. This term does not include a heat recovery steam generator that captures waste heat from a combustion turbine and boilers serving a generator that has a nameplate capacity greater than 25 MWe and produces electricity for sale, if such boilers meet the applicability criteria under Subpart M of Part 217.

[Note: This proposed amendment includes the exclusion pertaining to "a heat recovery steam generator that captures waste heat from a combustion turbine" that was proposed by the Illinois EPA in the Post-Hearing Comments of the Illinois EPA that were filed with the Board on November 5, 2008, but was inadvertently not included in the Illinois EPA's Motion to Amend Rulemaking Proposal that was filed with the Board on January 30, 2009, and subsequently granted by the Board on February 19, 2009.]

2. *Amend the Part 217 Table of Contents to add Appendix H as follows:*

217.APPENDIX H Compliance Dates for Certain Emission Units at Petroleum Refineries

3. *Amend Section 217.150 by adding subsection (a)(3) to read as follows:*

3) For purposes of this Section, "potential to emit" means the quantity of NO_x that potentially could be emitted by a stationary source before add-on controls based on the design capacity or maximum production capacity of the source and 8,760 hours per year or the quantity of NO_x that potentially could be emitted by a stationary source as established in a federally enforceable permit.

4. *Amend Section 217.152 by adding subsection (c) to read as follows:*

c) Notwithstanding subsection (a) of this Section, the owner or operator of emission units subject to Subpart D or E of this Part and located at a petroleum refinery must comply with the requirements of this Subpart and Subpart D or E of this Part, as applicable, for those emission units beginning January 1, 2012, except that the owner or operator of emission units listed in Appendix H must comply with the requirements of this Subpart, including the option of demonstrating compliance with the applicable Subpart through an emissions averaging plan under Section 217.158 of this Subpart, and Subpart D or E of this Part, as applicable, for the listed emission units beginning on the dates set forth in Appendix H.

With Agency approval, the owner or operator of emission units listed in Appendix H may elect to comply with the requirements of this Subpart and Subpart D or E of this Part, as applicable, by reducing the emissions of emission units other than those listed in Appendix H, provided that the emissions limitations of such other emission units are equal to or more stringent than the applicable emissions limitations set forth in Subpart D or E of this Part, as applicable, by the dates set forth in Appendix H.

5. *Amend Section 217.156 by amending subsection (f) to read as follows:*

f) The owner or operator of an emission unit subject to Subpart D, E, F, G, or H of this Part must provide the following information with respect to performance testing pursuant to Section 217.157:

1) Submit a testing protocol to the Agency at least 60 days prior to testing;

2) Notify the Agency at least 30 days in writing prior to conducting performance testing for NO_x emissions and five days prior to such testing;

3) Not later than 60 days after the completion of the test, submit the results of the test to the Agency; and

4) If, after the 30-days' notice for an initially scheduled test is sent, there is a delay (e.g., due to operational problems) in conducting the test as scheduled, the owner or operator of the unit must notify the Agency as soon as practicable of the delay in the original test date, either by providing at least seven days' prior notice of the rescheduled date of the test or by arranging a new test date with the Agency by mutual agreement.

6. *Amend Section 217.157 by amending subsection (e) to read as follows:*

e) Compliance with the continuous emissions monitoring system (CEMS) requirements by an owner or operator of an emission unit who is required to install, calibrate, maintain, and operate a CEMS on the emission unit under subsection (a)(1), (a)(2), (a)(3), or (b)(1) of this Section, or who has elected to comply with the CEMS requirements under subsection (a)(5) or (b)(5) of this Section, or who has elected to comply with the predictive emission monitoring system (PEMS) requirements under subsection (f) of this Section, is required by the following dates:

1) For the owner or operator of an emission unit that is subject to a compliance date in calendar year 2012 under Section 217.152 of this Subpart, compliance with the CEMS or PEMS requirements,

as applicable, under this Section for such emission unit is required by December 31, 2012, provided that during the time between the compliance date and December 31, 2012, the owner or operator must comply with the applicable performance test requirements under this Section and the applicable recordkeeping and reporting requirements under this Subpart. For the owner or operator of an emission unit that is in compliance with the CEMS or PEMS requirements, as applicable, under this Section on January 1, 2012, such owner or operator is not required to comply with the performance test requirements under this Section.

2) For the owner or operator of an emission unit that is subject to a compliance date in a calendar year other than calendar year 2012 under Section 217.152 of this Subpart, compliance with the CEMS or PEMS requirements, as applicable, under this Section for such emission unit is required by the applicable compliance date, and such owner or operator is not required to comply with the performance test requirements under this Section.

7. *Amend Section 217.157 by adding subsection (f) to read as follows:*

f) As an alternative to complying with the requirements of this Section, other than the requirements under subsections (a)(1) and (c) of this Section, the owner or operator of an emission unit who is not otherwise required by any another statute, regulation, or enforceable order to install, calibrate, maintain, and operate a CEMS on the emission unit may comply with the specifications and test procedures for a predictive emission monitoring system (PEMS) on the emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with the requirements of 40 CFR Part 60, Subpart A, and Appendix B, Performance Specification 16. The PEMS must be used to demonstrate compliance with the applicable emissions limitation or emissions averaging plan on an ozone season and annual basis.

8. *Amend Section 217.158 by changing subsection (a)(1)(c) to read as follows:*

C) Units that commence operation after January 1, 2002, if the unit replaces a unit that commenced operation on or before January 1, 2002, or it replaces a unit that replaced a unit that commenced operation on or before January 1, 2002. The new unit must be used for the same purpose and have substantially equivalent or less process capacity or be permitted for less NO_x emissions on an annual basis than the actual NO_x emissions of the unit or units that are replaced. Within 90 days after permanently shutting down a unit that is replaced, the owner or operator of such unit must submit a written request to withdraw or amend the applicable permit to reflect that the unit is no longer in service before the replacement unit may

be included in an emissions averaging plan.

9. *Amend Section 217.158 by changing subsection (a)(2)(c) to read as follows:*

C) Units that are required to meet emission limits or control requirements for NO_x as provided for in an enforceable order, unless such order allows for emissions averaging. Nothing in this subparagraph (C) is intended to prohibit a petroleum refinery from including industrial boilers or process heaters, or both, in an emissions averaging plan where an enforceable order does not prohibit the reductions made under such order from also being used for compliance with any rules or regulations designed to address regional haze or the non-attainment status of any area.

10. *Amend Section 217.158 by adding subsection (h) and (i) to read as follows:*

h) The owner or operator of an emission unit located at a petroleum refinery who is demonstrating compliance with an applicable Subpart through an emissions averaging plan under this Section may exclude from the calculation demonstrating compliance those time periods when an emission unit included in the emissions averaging plan is shut down for a maintenance turnaround, provided that such owner or operator notify the Agency in writing at least 30 days in advance of the shutdown of the emission unit for the maintenance turnaround and the shutdown of the emission unit does not exceed 45 days per ozone season or calendar year and NO_x pollution control equipment, if any, continues to operate on all other emission units operating during the maintenance turnaround.

i) The owner or operator of an emission unit that combusts a combination of coke oven gas and other gaseous fuels and located at a source that manufactures iron and steel who is demonstrating compliance with an applicable Subpart through an emissions averaging plan under this Section may exclude from the calculation demonstrating compliance those time periods when the coke oven gas desulfurization unit included in the emissions averaging plan is shut down for maintenance, provided that such owner or operator notify the Agency in writing at least 30 days in advance of the shutdown of the coke oven gas desulfurization unit for maintenance and such shutdown does not exceed 35 days per ozone season or calendar year and NO_x pollution control equipment, if any, continues to operate on all other emission units operating during the maintenance period.

11. *Amend Section 217.160 by changing subsection (c) to read as follows:*

c) The provisions of this Subpart do not apply to fluidized catalytic cracking units, their regenerator and associated CO boiler or boilers and CO furnace

or furnaces where present, if such units are located at a petroleum refinery and such units are required to meet emission limits or control requirements for NO_x as provided for in an enforceable order.

12. *Amend Section 217.164 to read as follows:*

Section 217.164 Emissions Limitations

On and after January 1, 2012, no person shall cause or allow emissions of NO_x into the atmosphere from any industrial boiler to exceed the following limitations. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

	Fuel	Emission Unit Type and Rated Heat Input Capacity (mmBtu/hr)		NO_x Emissions Limitation (lb/mmBtu) or Requirement
a)	Natural Gas or Other Gaseous Fuels	1)	Industrial boiler greater than 100	0.08
		2)	Industrial boiler less than or equal to 100	Combustion tuning
b)	Distillate Fuel Oil	1)	Industrial boiler greater than 100	0.10
		2)	Industrial boiler less than or equal to 100	Combustion tuning
c)	Other Liquid Fuels	1)	Industrial boiler greater than 100	0.15
		2)	Industrial boiler less than or equal to 100	Combustion tuning
d)	Solid Fuel	1)	Industrial boiler greater than 100, circulating fluidized bed combustor	0.12
		2)	Industrial boiler greater than 250	0.18
		3)	Industrial boiler	0.25

			greater than 100 but less than or equal to 250	
		4)	Industrial boiler Less than or equal to 100	Combustion tuning

e) For an industrial boiler combusting a combination of natural gas, coke oven gas, and blast furnace gas, the NO_x emissions limitation shall be calculated using the following equation:

NO_x emissions limitation for period in lb/MMBtu= $(NOx_{NG} * BTU_{NG} + NOx_{COG} * BTU_{COG} + NOx_{BFG} * BTU_{BFG}) / (BTU_{NG} + BTU_{COG} + BTU_{BFG})$

Where: NOx_{NG} = 0.084 lb/MMBtu for natural gas
BTU_{NG} = the heat input of natural gas in BTU over that period

NOx_{COG} = 0.144 lb/MMBtu for coke oven gas
BTU_{COG} = the heat input of coke oven gas in BTU over that period

NOx_{BFG} = 0.0288 lb/MMBtu for blast furnace gas
BTU_{BFG} = the heat input of blast furnace gas in BTU over that period

13. *Amend Section 217.184 to read as follows:*

Section 217.184 Emissions Limitations

On and after January 1, 2012, no person shall cause or allow emissions of NO_x into the atmosphere from any process heater to exceed the following limitations. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

	Fuel	Emission Unit Type and Rated Heat Input Capacity (mmBtu/hr)		NO_x Emissions Limitation (lb/mmBtu) or Requirement
a)	Natural Gas or Other Gaseous Fuels	1)	Process heater greater than 100	0.08
		2)	Process heater less than or equal to 100	Combustion tuning
b)	Residual Fuel Oil	1)	Process heater	0.10

			greater than 100, natural draft	
		2)	Process heater greater than 100, mechanical draft	0.15
		3)	Process heater less than or equal to 100	Combustion tuning
c)	Other Liquid Fuels	1)	Process heater greater than 100, natural draft	0.05
		2)	Process heater greater than 100, mechanical draft	0.08
		3)	Process heater less than or equal to 100	Combustion tuning

14. *Amend Section 217.244 to read as follows:*

Section 217.244 Emissions Limitations

a) On and after January 1, 2012, no person shall cause or allow emissions of NO_x into the atmosphere from any reheat furnace, annealing furnace, or galvanizing furnace used in iron and steel making to exceed the following limitations. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

	Emission Unit Type	NO_x Emissions Limitation (lb/mmBtu)
1)	Reheat furnace, regenerative	0.18
2)	Reheat furnace, recuperative, combusting natural gas	0.09
3)	Reheat furnace, recuperative, combusting a combination of natural gas and coke oven gas	0.142
4)	Reheat furnace, cold-air	0.03

5)	Annealing furnace, regenerative	0.38
6)	Annealing furnace, recuperative	0.16
7)	Annealing furnace, cold-air	0.07
8)	Galvanizing furnace, regenerative	0.46
9)	Galvanizing furnace, recuperative	0.16
10)	Galvanizing furnace, cold-air	0.06

b) On and after January 1, 2012, no person shall cause or allow emissions of NO_x into the atmosphere from any reverberatory furnace or crucible furnace used in aluminum melting to exceed the following limitations. Compliance must be demonstrated with the applicable emissions limitation on an ozone season and annual basis.

	Emission Unit Type	NO_x Emissions Limitation (lb/mmBtu)
1)	Reverberatory furnace	0.08
2)	Crucible furnace	0.16

15. *Add Appendix H to Part 217 as follows:*

Section 217.APPENDIX H: Compliance Dates for Certain Emission Units at Petroleum Refineries

ExxonMobil Oil Corporation (Facility ID 197800AAA)

Point	Emission Unit Description	Compliance Date
0019	Crude Vacuum Heater (13-B-2)	December 31, 2014
0038	Alky Iso-Stripper Reboiler (7-B-1)	December 31, 2014
0033	CHD Charge Heater (3-B-1)	December 31, 2014
0034	CHD Stripper Reboiler (3-B-2)	December 31, 2014
0021	Coker East Charge Heater (16-B-1A)	December 31, 2014
0021	Coker East Charge Heater (16-B-1B)	December 31, 2014
0018	Crude Atmospheric Heater (1-B-1A)	December 31, 2014
0018	Crude Atmospheric Heater (1-B-1B)	December 31, 2014

ConocoPhillips Company Wood River Refinery (Facility ID 119090AAA)

Point	Emission Unit Description	Compliance Date
0017	BEU HM-1	December 31, 2012
0018	BEU HM-2	December 31, 2012
0004	CR-1 Feed Preheat, H-1	December 31, 2012
0005	CR-1 1st Interreactor Heater, H-2	December 31, 2012
0009	CR-1 3rd Interreactor Heater, H-7	December 31, 2012
0091	CR-3 Charge Heater	December 31, 2012
0092	CR-3 1st Reheat Heater, H-5	December 31, 2012
0082	Boiler 17	December 31, 2012
0080	Boiler 15	December 31, 2012
0073	Alky HM-2 Heater	December 31, 2012
0662	VF-4 Charge Heater, H-28	December 31, 2012
0664	DU-4 Charge Heater, H-24	December 31, 2014
0617	DCU Charge Heater, H-20	December 31, 2014
0014	HCU Fractionator Reboil, H-3	December 31, 2016
0024	DU-1 Primary Heater South, F-301	December 31, 2016
0025	DU-1 Secondary Heater North, F-302	December 31, 2016
0081	Boiler 16	December 31, 2016
0083	Boiler 18	December 31, 2016
0095	DHT Charge Heater	December 31, 2016
0028	DU-2 Lube Crude Heater, F-200	December 31, 2016
0029	DU-2 Mixed Crude Heater West, F-202	December 31, 2016
0030	DU-2 Mixed Crude Heater East, F-203	December 31, 2016
0084	CR-2 North Heater	December 31, 2016
0661	CR-2 South Heater	December 31, 2016

WHEREFORE, for the reasons set forth above, the Illinois EPA moves that the Board amend Parts 211 and 217 as set forth herein.

Respectfully submitted,
ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: _____
Gina Roccaforte
Assistant Counsel
Division of Legal Counsel

DATED: March 23, 2009
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217/782-5544

THIS FILING IS SUBMITTED ON RECYCLED PAPER

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	
NITROGEN OXIDES EMISSIONS FROM	)	R08-19
VARIOUS SOURCE CATEGORIES:	)	(Rulemaking – Air)
AMENDMENTS TO 35 ILL. ADM. CODE	)	
PARTS 211 AND 217	)	

POST-HEARING COMMENTS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

NOW COMES the Illinois Environmental Protection Agency ("Illinois EPA"), by its attorneys, and respectfully submits its post-hearing comments in the above rulemaking proceeding. The Illinois EPA appreciates the efforts of the Illinois Pollution Control Board ("Board") in this rulemaking proposal to amend 35 Ill. Adm. Code Parts 211 and 217 to control the emissions of nitrogen oxides ("NO_x") from certain major stationary sources in areas designated as nonattainment with respect to National Ambient Air Quality Standards ("NAAQS").

The Illinois EPA witnesses testified and provided evidence in support of the rulemaking proposal at the first hearing that was held in Springfield on October 14, 2008. The second hearing that was held in Chicago on December 9-10, 2008, gave the other participants to the rulemaking the opportunity to present testimony. During the course of this rulemaking, a number of issues arose, and as a result, the Illinois EPA engaged in negotiations with interested parties on these issues. Such negotiations led to the revision of certain provisions, and on January 30, 2009, the Illinois EPA filed a Motion to Amend Rulemaking Proposal with the Board to reflect such amended provisions. On February 3, 2009, a third hearing was held in Edwardsville to receive testimony on the proposal and any participants' responses to questions raised on the record and reflected in the transcripts of the earlier hearings in this proceeding. At this hearing, counsel on behalf of participant Midwest Generation stated on the record that the

company has reviewed the motion and that it accepts the motion as it applies to Midwest Generation. Furthermore, the representative of Saint-Gobain Containers, Inc., stated on the record that the company supports the motion. On February 19, 2009, the Board granted the Illinois EPA's Motion to Amend Rulemaking Proposal.

These post-hearing comments of the Illinois EPA address the following areas: Finding of Failure to Make Required State Implementation Plan Submissions, Clean Air Act Requirements, Recent Developments Related to This Rulemaking, and Discussions with Interested Parties. Since the February hearing, the Illinois EPA has continued to engage in negotiations with interested parties on remaining unresolved issues. Such negotiations have led to the further revision of certain provisions, and the Illinois EPA has filed a Second Motion to Amend Rulemaking Proposal with the Board along with these post-hearing comments. The Illinois EPA believes that the proposed amendments have addressed all substantive comments submitted during this rulemaking and the Illinois EPA respectfully urges the Board to proceed to First Notice under the Illinois Administrative Procedure Act, 5 ILCS 100/1 *et seq.*, as expeditiously as possible.

Finding of Failure to Make Required State Implementation Plan Submissions

By letter dated March 17, 2008, the United States Environmental Protection Agency ("USEPA") notified the State of Illinois that it had failed to make required submissions under the Clean Air Act ("CAA"), and that USEPA would be publishing a rulemaking notice to announce this finding. Letter from Mary A. Gade, Regional Administrator, USEPA, to Douglas P. Scott, Director, Illinois EPA. Specifically, and to reiterate again, as the Illinois EPA stated in its Statement of Reasons and at hearing, on March 24, 2008, USEPA made a finding that Illinois, among other states, failed to make a Reasonably Available Control Technology ("RACT")

submittal required under Part D of Title I of the CAA for its two moderate nonattainment areas. *See*, 73 *Fed. Reg.* 15416 (March 24, 2008). Such finding starts the 18-month emission offset sanctions clock and 24-month highway funding sanctions clock under Section 179(a) and (b) of the CAA and the 24-month clock for the promulgation by USEPA of a Federal Implementation Plan ("FIP") under Section 110(c) of the CAA. 42 U.S.C. §§ 7509(a) and (b) and 7410(c).

On March 12, 2009, to ensure that the CAA's requirements are met in a timely manner and to avoid adverse consequences of failure to do so, the USEPA informed Director Douglas P. Scott of the Illinois EPA that the State needs to address the findings of failure to submit the required ozone State Implementation Plan ("SIP") elements previously identified by the USEPA in the March 17, 2008, letter and in the March 24, 2008, final rule (73 *Fed. Reg.* 15416). Letter from Bharat Mathur, Acting Regional Administrator, USEPA, Region 5, to Douglas P. Scott, Director, Illinois EPA ("March 12, 2009, letter"). By this letter, USEPA further reaffirmed that the final rule started a sanctions clock that, if not terminated or stayed by USEPA, will result in the implementation of several sanctions in the Chicago and Metro-East St. Louis 8-hour ozone nonattainment areas, as early as September 2009. *Id.*

USEPA sent this letter "to request expedited action" by the Illinois EPA and the Board "to complete the ozone SIP development and adoption process for the missing SIP elements * * * to avoid implementation of sanctions." *Id.* On March 18, 2009, the Illinois EPA submitted the attainment demonstration for the Chicago area, thereby leaving only the NO_x RACT submittal for the Chicago and Metro-East nonattainment areas as the only outstanding requirement to be submitted to USEPA.

USEPA reiterates in the letter that if, by September 24, 2009, Illinois has not submitted all of the required SIP elements, pursuant to Section 179(a) of the CAA and 40 CFR 52.31, the

new source offset sanction, identified in Section 179(b)(2) of the CAA, will apply in the Chicago and Metro-East St. Louis areas. March 12, 2009, letter. The increased new source emissions offset ratio (2:1) will make it more difficult for new sources to locate in the nonattainment areas. *Id.* Furthermore, if by six months after imposition of the first sanction, Illinois has not submitted the required SIP elements, highway sanctions will be implemented in accordance with 40 CFR 52.31. *Id.* This may adversely affect Federal funding of new highway projects, including highway project funding under the American Recovery and Reinvestment Act of 2009, and would restrict the types of highway projects that the State and local governments can implement. *Id.* Finally, if by March 24, 2010, Illinois has not submitted the required SIP elements and USEPA has not approved these SIP revisions, Section 110(c) of the CAA provides for USEPA to promulgate FIPs to replace the missing SIP elements. *Id.* If it is necessary for USEPA to promulgate a FIP, USEPA may pay the costs of developing and promulgating this plan with section 105 funds that would otherwise be given to Illinois. *Id.*

USEPA is very concerned that the time available to avoid the implementation of sanctions is very short. *Id.* Illinois must ensure that sanctions are not imposed and the Illinois EPA believes that the appropriate means to accomplish this is to expedite the adoption and submittal of this proposal. Accordingly, if this proposed rulemaking is not promulgated and a complete submittal made to USEPA by September 24, 2009, the offset sanction will apply in the two nonattainment areas. If, by six months after the offset sanction is imposed, USEPA has not affirmatively determined that Illinois has made a complete submission, then the highway funding sanction will apply in the two nonattainment areas.

For the reasons stated above, and due to the impending date of September 24, 2009, so as to avoid the imposition of sanctions, this rulemaking proposal needs to be adopted in an

expedited manner, and accordingly, on March 19, 2009, the Illinois EPA filed a Motion for Expedited Review with the Board. As set forth in that motion, the Illinois EPA urges the Board to grant the motion and proceed to First Notice under the Illinois Administrative Procedure Act, 5 ILCS 100/1 *et seq.*, as expeditiously as possible. On March 20, 2009, Midwest Generation, a participant in this rulemaking, both before the Board and in the Illinois EPA's outreach efforts, and part of the community regulated by the proposed rule, filed its response to the Illinois EPA's motion supporting the motion and urging the Board to adopt the proposal as it has been amended over the course of the rulemaking as soon as possible.

Clean Air Act Requirements

Under Section 110 of the CAA and related provisions, states are required to submit, for USEPA approval, SIPs that provide for the attainment and maintenance of standards established by USEPA through control programs directed to sources of the pollutants involved. 42 U.S.C. §7410. The CAA also provides for the State to address emissions sources on an area-specific basis through such requirements as reasonably available control measures ("RACM") and RACT. *See*, 42 U.S.C. §§7502 and 7511a. For each nonattainment area, the CAA requires the State to demonstrate that it has adopted "all reasonably available control measures as expeditiously as possible (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards." 42 U.S.C. § 7502(c)(1). This rulemaking proposal has been prepared to satisfy Illinois' obligation to submit a SIP to address the requirements under Sections 172 and 182 of the CAA for major stationary sources of NO_x in areas designated as nonattainment with respect to the 8-hour ozone and $PM_{2.5}$ NAAQS.

USEPA designated two areas in Illinois as nonattainment for the 8-hour and $PM_{2.5}$ NAAQS, respectively, the Chicago-Gary-Lake County, IL-IN designated area and the St. Louis, MO-IL designated area. Such designations triggered requirements under the CAA for adopting regulations that reduce emissions sufficiently to demonstrate attainment of the standards. Under Section 172(c)(1), states with nonattainment areas are required to submit, in part, SIPs that provide for the adoption of RACM for stationary sources in all nonattainment areas as expeditiously as possible. 42 U.S.C. § 7502(c)(1). Section 172(c)(1) of the CAA provides, in relevant part, as follows:

> (c) Nonattainment plan provisions
>
> The plan provisions (including plan items) required to be submitted under this part shall comply with each of the following:
>
> (1) In general
>
> Such plan provisions shall provide for the implementation of all reasonably available control measures as expeditiously as practicable (including such reductions in emissions from existing sources in the area as may be obtained through the adoption, at a minimum, of reasonably available control technology) and shall provide for attainment of the national primary ambient air quality standards.
>
> * * *

42 U.S.C. §7502(c)(1). A subset of RACM is the RACT requirements. RACT is defined as the lowest emission limitation that a particular source can meet by applying a control technique that is reasonably available considering technological and economic feasibility. *See*, 44 *Fed. Reg.* 53762 (September 17, 1979). Section 182(b)(2) of the CAA requires states to adopt RACT rules for all areas designated nonattainment for ozone and classified as moderate or above. Section 182(b)(2) of the CAA states, in part, as follows:

> (b) Moderate Areas
>
> Each State in which all or part of a Moderate Area is located shall, with respect to the Moderate Area, make the submissions described under subsection (a) of this section

(relating to Marginal Areas), and shall also submit the revisions to the applicable implementation plan described under this subsection.

* * *

(2) Reasonably available control technology

The State shall submit a revision to the applicable implementation plan to include provisions to require the implementation of reasonably available control technology under section 7502(c)(1) of this title with respect to each of the following:

(A) Each category of VOC sources in the area covered by a CTG document issued by the Administrator between November 15, 1990, and the date of attainment.

(B) All VOC sources in the area covered by any CTG issued before November 15, 1990.

(C) All other major stationary sources of VOCs that are located in the area.

Each revision described in subparagraph (A) shall be submitted within the period set forth by the Administrator in issuing the relevant CTG document. The revisions with respect to sources described in subparagraphs (B) and (C) shall be submitted by 2 years after November 15, 1990, and shall provide for the implementation of the required measures as expeditiously as practicable but no later than May 31, 1995.

* * *

42 U.S.C. §7511a(b)(2). In addition, under Section 182(f) of the CAA, an overlapping requirement in each state in which all or part of a "moderate" area is located is the adoption of RACT for major NO_x sources. 42 U.S.C. § 7511a(f). Section 182(f) of the CAA states, in pertinent part, as follows:

(f) NO_x requirements

(1) The plan provisions required under this subpart for major stationary sources of volatile organic compounds shall also apply to major stationary sources (as defined in section 7602 of this title and subsections (c), (d), and (e) of this section) of oxides of nitrogen. * * *

42 U.S.C. §7511a(f). Section 302 of the CAA defines "major stationary source" as any stationary facility or source of air pollutants that directly emits, or has the potential to emit, one hundred tons per year or more of any air pollutant. 42 U.S.C. §7602.

These sections of the CAA, taken together, establish the requirements for Illinois to submit NO_x RACT regulations for all major stationary sources of NO_x in $PM_{2.5}$ nonattainment areas and ozone nonattainment areas classified as moderate and above. *See also, Clean Air Fine Particle Implementation Rule; Final Rule,* 72 *Fed. Reg.* 20586 (April 25, 2007), and *Final Rule To Implement the 8-Hour Ozone National Ambient Air Quality Standard; Final Rule*, 70 *Fed. Reg.* 71612 (November 29, 2005).

Recent Developments Related to This Rulemaking

On March 9, 2009, as required under the CAA, the Illinois EPA submitted the State designation recommendations to USEPA for the 2008 revised ozone standards. The Illinois EPA recommended that portions of the Chicago and Metro-East metropolitan areas be designated as nonattainment for the revised 8-hour ozone NAAQS. As violations of the revised ozone standard have been measured in these areas during 2006-2008, designating them as nonattainment is appropriate. The remainder of Illinois is attaining the revised ozone standard and should, therefore, be designated as attainment. The CAA requirements regarding implementation of RACT in ozone nonattainment areas will again be triggered for the areas so designated for the 2008 ozone standard.

The recommended nonattainment boundaries are the same as the boundaries established pursuant to the 1997 revisions of the ozone NAAQS, with the exception of Jersey County. The Illinois EPA recommended that Jersey County, which is located in the Metro-East area in southwestern Illinois, be designated as attainment for the revised ozone standard even though it

is currently designated nonattainment for the 1997 version of the standard. Jersey County is rural, with virtually no emission sources, and does not contribute to nearby nonattainment areas. Jersey County was included in the nonattainment area established in 2004 because violations of that standard were measured in 2001-2003 at Illinois EPA's monitoring station located in Jerseyville. Based on 2006-2008 data, the monitoring station located in Jerseyville is attaining not just the level of the standard established in 1997, but attaining the level of the revised standard as well.

On February 24, 2009, the United States Court of Appeals for the District of Columbia Circuit ("D.C. Circuit") remanded the annual air quality standard for fine particulate matter ("PM") to the USEPA, but upheld the USEPA's standard for larger particles. *See, American Farm Bureau Federation v. EPA*, --- F.3d ----, 2009 WL 437050 (C.A.D.C.). The court ordered USEPA to reconsider both the primary and secondary air quality standards for fine PM. *Id.* According to the decision, as to the primary annual fine PM standard, the USEPA "failed to explain adequately" why an annual level of standard of 15 micrograms per cubic meter of air is "requisite to protect public health, "including the health of vulnerable subpopulations, while providing "an adequate margin of safety." *Id.* at 13. The court also remanded USEPA's secondary air quality standard, also set at 15 micrograms per cubic meter and meant to protect public welfare, because USEPA unreasonably concluded that the standard is adequate to protect the public welfare from adverse effects on visibility. *Id.*

The annual air quality standard for fine PM is likely to be strengthened under President Obama's Administration. A strengthened annual standard would further decrease the major health risks, such as heart disease, lung cancer and asthma attacks, caused by PM emissions.

On July 11, 2008, the United States Court of Appeals for the D.C. Circuit in the *North Carolina* case issued its decision regarding petitions for review challenging various aspects of the CAIR. *North Carolina v. EPA,* 531 F.3d 896 (D.C. Cir. 2008). The court vacated the rule in its entirety and remanded to USEPA to promulgate a rule consistent with the court's opinion. On September 24, 2008, USEPA filed a petition for rehearing or, in the alternative, for a remand of the case without vacatur, and parties were directed to file responses to USEPA's petition. On December 23, 2008, the court granted USEPA's petition only to the extent that it remanded the case without vacatur for USEPA to conduct further proceedings consistent with the court's opinion. *North Carolina v. EPA,* 550 F.3d 1176 (D.C. Cir. 2008). As a result, the CAIR remains in effect while USEPA remedies the deficiencies identified by the court. Accordingly, as of January 1, 2009, the requirements of the NO_x SIP Call have been replaced by the CAIR. Since the Board has already adopted, and USEPA has approved, regulations that comply with CAIR for electric generating units ("EGUs") in Illinois, the Illinois EPA is developing revisions to the Illinois CAIR to sunset the provisions of the NO_x SIP Call affecting EGUs. These revisions will be submitted to the Board in the next few weeks. Illinois must also correct its SIP to ensure that non-EGUs affected by the NO_x SIP Call meet the emissions budget contained in the NO_x SIP Call, even though Illinois did not opt to include non-EGUs in the CAIR trading program. The Illinois EPA is also developing a regulatory proposal to resolve this deficiency and hopes to submit this proposal to the Board in the near future.

On December 22, 2008, the USEPA designated areas throughout the United States, including areas in Illinois, as nonattainment for the 24-hour $PM_{2.5}$ air quality standard established in 2006. Areas in Illinois that were designated by USEPA as nonattainment in December 2008 include both the Chicago area and the Metro-East area, the same areas designated previously as

nonattainment for the annual $PM_{2.5}$ standard. USEPA also listed portions of Rock Island and Massac Counties based on air quality violations in adjoining states. Based on 2008 monitoring data, however, the Illinois EPA has requested that USEPA amend the nonattainment designations for some areas in Illinois, specifically the Chicago area, Rock Island and Massac Counties. Assuming USEPA agrees, the Metro-East area would be the only area in Illinois to be designated nonattainment for the 24-hour $PM_{2.5}$ standard. Illinois must develop an attainment plan and adopt control measures needed to attain the 24-hour $PM_{2.5}$ standard in the Metro-East area within three years of the effective date of USEPA's decision, and Illinois must attain the standards within five years of the effective date.

The Illinois EPA acknowledges that recent developments regarding the ozone and $PM_{2.5}$ NAAQS provide a complicated landscape for addressing regulatory requirements. As Illinois has made continued progress in meeting the NAAQS, the standards have been tightened and Illinois can reasonably expect that they will be tightened further. Illinois must therefore continue to seek reasonable emission reduction measures to address the NAAQS, which in the Illinois EPA's opinion, argues strongly for adoption of this proposal.

Discussions with Interested Parties

The Illinois EPA has diligently attempted to address the concerns of interested parties and believes that it has addressed the concerns of all such parties, except for the Illinois Environmental Regulatory Group and ArcelorMittal USA, Inc.

Illinois Environmental Regulatory Group

The Illinois Environmental Regulatory Group ("IERG") contends that the proposal being considered is too stringent to be considered RACT, is not reasonable or cost effective, and that

the rule may not be necessary. As an alternative, IERG recommends that Illinois rely upon existing CAIR and NO_x SIP Call rules for EGUs and non-EGUs to meet the RACT requirement. The Illinois EPA strongly disagrees with IERG's position on these issues.

As stated in the Illinois EPA's Statement of Reasons for this rulemaking, RACT is defined as the lowest emission limitation that a particular source can meet by applying a control technique that is reasonably available considering technological and economic feasibility. *See*, 44 *Fed. Reg.* 53762 (September 17, 1979). The Illinois EPA has provided extensive documentation and testimony justifying the proposed emissions limitations as both technically and economically feasible, and can be achieved with technology that is reasonably available. IERG has not provided any information about the technical feasibility of meeting the proposed limitations, although it has argued that the proposal may not be economically reasonable because of the time allowed in the original proposal for companies to install emission reduction measures. The Illinois EPA has addressed this concern with several amendments addressing compliance deadlines. Illinois EPA has recommended delaying the compliance deadline for most emission units until January 1, 2012, and has also recommended delaying the deadline for installation of continuous emissions monitoring systems ("CEMS") until December 31, 2012. *See*, the Illinois EPA's Motion to Amend Rulemaking Proposal that was filed with the Board on January 30, 2009, and subsequently granted by the Board on February 19, 2009. To address concerns expressed by petroleum refineries, and to mitigate the potential for unplanned shutdowns which may result in gasoline shortages in Illinois, the Illinois EPA has recommended extending the compliance deadlines for certain emission units at affected refineries to reflect planned maintenance turnarounds. *See*, the Illinois EPA's Second Motion to Amend Rulemaking Proposal that was filed with these post-hearing comments.

IERG has offered a comparison of the Illinois EPA's proposed emission limits to those adopted in other states to support its contention that the proposed emission limits are too stringent. *See,* Exhibit 5, Pre-Filed Testimony of Deirdre K. Hirner on Behalf of the Illinois Environmental Regulatory Group, Exhibit A. The last page of the attachment compares Illinois EPA's proposed NO_x RACT limits to those adopted or proposed in other states. It is noted that the NO_x RACT limits in several of the states listed, in particular the northeast states of Delaware, Pennsylvania, and Virginia (as well as other northeast states not listed in the table), are less stringent than the limits proposed in Illinois. The limits in the northeast states were originally agreed to in a Memorandum of Understanding ("MOU") signed by the states in the Ozone Transport Commission ("OTC") in 1994. As testified by Dr. James Staudt in this proceeding, NO_x control systems have advanced substantially since the time the northeast states adopted these rules, so cost-effective technologies available today will yield significantly lower NO_x emissions. In 2001, the OTC issued a "model rule" for further controlling NO_x emissions in northeast states which recommends emission limits for industrial fuel combustion sources that are much lower than the limits contained in the 1994 OTC MOU. More recently, the States of Wisconsin and Ohio have adopted NO_x RACT emission limits that are similar to those proposed by the Illinois EPA that reflect the improvements in NO_x control technology since the northeast states adopted their NO_x RACT rules.

The Illinois EPA's Technical Support Document ("TSD") provides detailed performance and cost information that demonstrates that the proposed emissions limitations contained in its NO_x RACT proposal are feasible technologically and economically. For example, Table 2-17a of the TSD demonstrates that using control technologies costing less than $3000 per ton of NO_x removed, NO_x emission rates as low as 0.024 lb/mmBtu have been achieved on medium sized

boilers burning natural gas. Controlled emission rates of 0.05 lb/mmBtu to 0.10 lb/mmBtu using other cost-effective technologies are also shown in the table. The Illinois EPA's proposed emissions limitation for natural gas industrial boilers greater than 100 mmBtu/hr is 0.08 lb/mmBtu, which is well within the range (in fact at the upper end of the range) of emission rates achieved using cost effective control technologies. For industrial boilers using distillate fuel oil, the range of controlled emission rates listed in Table 2-17b of the TSD using cost effective controls is 0.03 lb/mmBtu to 0.10 lb/mmBtu. The Illinois EPA's proposed emissions limitation for industrial boilers greater than 100 mmBtu/hr using distillate fuel oil is 0.10 lb/mmBtu, which again is within the range (again at the upper end of the range) of emission rates achieved using cost effective control technologies. For industrial boilers using residual fuel oil, the range of controlled emission rates listed in Table 2-17b of the TSD using cost effective controls is 0.045 lb/mmBtu to 0.19 lb/mmBtu. The Illinois EPA's proposed emissions limitation for industrial boilers greater than 100 mmBtu/hr using residual fuel oil is 0.15 lb/mmBtu, which again is within the range (again at the upper end of the range) of emission rates achieved using cost effective control technologies. For coal-fired boilers, the range of controlled emission rates listed in Table 2-17c of the TSD is 0.14 lb/mmBtu to 0.35 lb/mmBtu, depending on the boiler type (based on control efficiencies of 50-80% control listed in the table and an average uncontrolled emission rate of 0.69 lb/mmBtu). The Illinois EPA's proposed emissions limitation for coal-fired industrial boilers greater than 100 mmBtu/hr but less than or equal to 250 mmBtu/hr is 0.25 lb/mmBtu, which is within the range of emission rates achieved using cost effective control technologies. For circulating fluidized bed combustor ("CFBC") boilers, the range of controlled emission rates listed in Table 2-17c of the TSD using cost effective controls is 0.08 lb/mmBtu to 0.12 lb/mmBtu. The Illinois EPA is proposing to amend the emissions

limitation for industrial boilers, CFBC, greater than 100 mmBtu/hr to 0.12 lb/mmBtu. *See*, the Illinois EPA's Second Motion to Amend Rulemaking Proposal that was filed with these post-hearing comments. Thus, IERG's contention that the Illinois EPA's proposed emissions limitations are too stringent, and are not reasonable or cost effective, is unfounded.

As stated previously, IERG contends that the Illinois EPA's proposal may not be necessary and that Illinois should rely upon existing CAIR and NO_x SIP Call rules for EGUs and non-EGUs to meet the RACT requirement. The Illinois EPA strongly opposes reliance on these Federal trading programs to meet local nonattainment area requirements. The United States Court of Appeals, in its decision on the CAIR rule clearly indicated that a regional trading program should not be relied upon to address local nonattainment problems, and nonattainment problems due to transport between adjoining states. *North Carolina v. EPA,* 531 F.3d 896 (D.C. Cir. 2008). The court determined that CAIR is not adequate and remanded CAIR to USEPA. *North Carolina v. EPA,* 550 F.3d 1176 (D.C. Cir. 2008). USEPA must therefore revise CAIR, and it is unlikely that the trading program will be used to address local nonattainment problems. Thus, IERG's recommendation to use CAIR to address NO_x RACT is founded on an assumption that the court has deemed incorrect, that CAIR as originally issued was adequate for attainment and could therefore serve as RACT.

In *NRDC v. EPA*, No. 06-1045, 2007 WL 836786 (C.A.D.C.), the National Resources Defense Council ("NRDC") alleges that under the *Final Rule To Implement the 8-Hour Ozone National Ambient Air Quality Standard--Phase 2*, 70 *Fed. Reg.* 71612 (November 29, 2005), USEPA's waiver of RACT requirements for all sources covered by the NO_x SIP Call is illegal and arbitrary. NRDC claims that USEPA's waiver of RACT for sources covered by the NO_x SIP Call plainly violates the CAA's express requirement for RACT at existing sources in each

nonattainment area. Section 172(c)(1) of the CAA. *Final Opening Brief of Natural Resources Defense Council.* Section 110(a)(2)(D) of the CAA requires each state's SIP to prevent emissions that significantly contribute to nonattainment in other states. *Id.* Although the NO_x SIP Call helps to address interstate transport of air pollution, it is not a substitute for the CAA's separate requirements for pollution controls within individual nonattainment areas. *Id.* NRDC further alleges that USEPA cannot substitute market-based methods of controlling pollution for congressionally mandated methods. *Id.* NRDC claims that USEPA tries to obscure its violation of the statutory RACT mandate by asserting that it deems a source's participation in the NO_x SIP Call program to constitute RACT, and that such an approach is unlawful and arbitrary. *Id.* Oral arguments were held on November 20, 2008, but the case has not yet been decided.

The Illinois EPA strongly opposes reliance on the NO_x SIP Call to address NO_x RACT for non-EGUs for the same reason, but for other reasons as well. At the Federal level, the NO_x SIP Call has been replaced by CAIR as of January 1, 2009. As mentioned previously, Illinois must sunset its existing NO_x SIP Call provisions for EGUs (Subpart W of Part 217) and must amend its rules for non-EGUs (Subpart U of Part 217) to ensure continued compliance with the State's non-EGU NO_x budget. Although the Illinois EPA intends to make a regulatory proposal soon to address this deficiency, it is inappropriate to rely on a rule for purposes of NO_x RACT that does not yet exist, or has not even been proposed.

The NO_x SIP Call, as adopted in Subpart U of Part 217, does not adequately address major NO_x emission sources in Illinois' nonattainment areas. Subpart U of Part 217 only addresses industrial boilers with a capacity greater than 250 mmBtu/hr. It does not address boilers with less capacity, even if those boilers are located at a major NO_x source located in a nonattainment area. It does not address process heaters, glass melting furnaces, or reheat

furnaces at iron and steel plants, even though such units can be controlled using cost effective controls. Further, the NO_x SIP Call trading program is an ozone season control program, and cannot be relied upon to address $PM_{2.5}$ RACT, since the $PM_{2.5}$ air quality standards exist on both an annual and daily basis. Subpart U of Part 217 is not, nor was it intended to be, an appropriate program to address NO_x RACT.

IERG's comments throughout this rulemaking ignore the potential air quality benefits to be derived from implementation of NO_x RACT. NO_x is a precursor to the formation of both ozone and $PM_{2.5}$, so reducing NO_x emissions has a beneficial effect on reducing ozone and $PM_{2.5}$. Even though the Chicago area may be attaining the 1997 ozone standard based on the three most recent years of data, and the Metro-East metropolitan area is expected to attain this year, Holland, Michigan, which is located downwind of Chicago, is not meeting the standard. In testimony before the Board in this proceeding, Michael Koerber, Executive Director of the Lake Michigan Air Directors Consortium ("LADCO"), indicated that Holland, Michigan, will not attain the 1997 ozone standard by its 2009 attainment date. Modeling conducted by LADCO indicates that Holland, Michigan, will not attain until 2012, when additional emission reductions are implemented from a number of control programs, including NO_x RACT in Illinois.

Mr. Koerber also testified that USEPA has recently released a study of the ozone problem in western Michigan that concluded that NO_x emissions from northeastern Illinois significantly contribute to the western Michigan ozone problem. *See*, Exhibit 19, Western Michigan Ozone Study: Draft Report (January 21, 2009). The Energy Policy Act of 2005 required USEPA to conduct a demonstration project to address the effect of transported ozone and ozone precursors in Southwestern Michigan. 42 U.S.C.A. § 16360. Accordingly, USEPA, in its Western Michigan Ozone Study: Draft Report, addressed this requirement by reviewing the ozone

problem in Western Michigan and what is required to meet the federal air quality standards for ozone. *See*, Exhibit 19, Western Michigan Ozone Study: Draft Report (January 21, 2009). Ambient monitoring data for the past three summers (2005-2007) show that the 1997 ozone standard is not being met at three sites (Holland, Muskegon, and Jenison) in Western Michigan, and the 2008 ozone standard is not being met at all monitoring sites in Western Michigan. *Id.*

A key finding of the Western Michigan Ozone Study is that ozone levels in Western Michigan (both at locations of measured and modeled nonattainment) are dominated by transport, and Western Michigan is impacted by transport of ozone and ozone-forming emissions from major urban areas in the Lake Michigan area, primarily Chicago, as well as regional transport of ozone and ozone-forming emissions from other source areas in the Midwest.

As mentioned previously, USEPA tightened the ozone standard in 2008. Even as the Chicago and Metro-East areas are attaining or expected to attain the 1997 ozone standard, these areas are not meeting the 2008 version of the standard. On March 9, 2009, Illinois recommended to USEPA that both the Chicago and Metro-East areas be designated nonattainment for the 2008 standard. USEPA is expected to confirm Illinois' recommendation when the nonattainment designations are finalized in March 2010. With the pending nonattainment designation for the 2008 ozone standard, the CAA requires Illinois to again address requirements to implement RACT. Adoption and implementation of the subject NO_x RACT proposal will likely satisfy the CAA requirement to implement RACT for the new ozone standard. More importantly, the resulting NO_x emissions reductions will contribute to attainment of the new ozone standard in these and downwind areas.

Regarding $PM_{2.5}$, the Chicago area is currently meeting the annual $PM_{2.5}$ standard established in 1997, and the Illinois EPA will soon request redesignation of the Chicago area to

attainment for this standard. The Metro-East area is not attaining the annual $PM_{2.5}$ standard, and will likely not meet the standard by the required attainment date (April 2010). Illinois must implement all reasonable control measures to provide for attainment of the standard in this area as soon as possible. USEPA also tightened the 24-hour $PM_{2.5}$ standard in 2006. At present, the Chicago area is meeting the new $PM_{2.5}$ standard, but the Metro-East area is not. The Metro-East area is expected to be designated nonattainment for the 24-hour $PM_{2.5}$ standard by USEPA within the next few months. The CAA again will require Illinois to implement all reasonably available control measures, including RACT. Again, adoption and implementation of the subject NOx RACT proposal will likely satisfy the CAA requirement to implement RACT for NOx for the 24-hour $PM_{2.5}$ standard.

Finally, as noted *supra*, on February 24, 2009, the United States Court of Appeals for the D.C. Circuit remanded back to USEPA its 2006 decision to maintain at its current level the annual $PM_{2.5}$ air quality standard. *American Farm Bureau Federation v. EPA*, --- F.3d ----, 2009 WL 437050 (C.A.D.C.). Since the USEPA Administrator's 2006 decision was not consistent with the findings of the Clean Air Scientific Advisory Committee or the recommendations of USEPA's staff, it is likely that USEPA will adopt a more stringent $PM_{2.5}$ annual standard in the near future. Illinois will be required to address this air quality standard through implementation of control measures that reduce precursor emissions, including NO_x. The Illinois EPA believes that there is sufficient justification, from both an air quality management perspective and to meet specific CAA requirements, to justify adoption of NO_x RACT at this time.

IERG requested that the rule not contain emission limitations for emission units that are not currently operating in the nonattainment areas, namely cement kilns and aluminum melting furnaces. The Illinois EPA requests that the emissions limitations for such units be adopted as

proposed. Establishing NOx emission limitations will provide a floor for future emission sources that may seek to locate in these areas. In fact, the Illinois EPA has recently received and is currently reviewing an application from a company seeking to construct a cement kiln in the Chicago area. It is true that requirements for new sources are generally more stringent than RACT would require, but it is also true that applicants frequently seek alternatives to such new source requirements. The Illinois EPA believes that it is reasonable that new sources seeking to operate in nonattainment areas in Illinois should meet RACT requirements at a minimum.

ArcelorMittal USA, Inc.

Illinois EPA is proposing to amend the NOx emissions limitation proposed for recuperative reheat furnaces to address comments submitted to the Board by both United States Steel Corporation ("US Steel") and ArcelorMittal USA, Inc. ("ArcelorMittal") Although the Illinois EPA and US Steel have agreed on the amendments as they relate to operations at US Steel's Granite City Works, the Illinois EPA and ArcelorMittal have not agreed on the proposed amendment. However, for the reasons set forth in these post-hearing comments and the Second Motion to Amend Rulemaking Proposal filed with these comments, the Illinois EPA believes the amendments are justified and urges the Board to accept them as set forth in the Illinois EPA's Second Motion to Amend Rulemaking Proposal.

In its comments filed on November 25, 2008, with the Board, ArcelorMittal contends that the furnace it operates at its Riverdale facility is not a reheat furnace and that the proposed emissions limitation is inappropriate for its furnace. The Illinois EPA disagrees with ArcelorMittal's contention that its furnace is not a reheat furnace, and does not believe a specific definition of a reheat furnace in the Board's rules is necessary. The description of the furnace at Riverdale provided by the company is consistent with the description provided in the Illinois

EPA's TSD (see page 93 of the TSD). Further, the Illinois EPA considers the NO_x control technologies identified in the TSD to be reasonably available, technically feasible, and cost effective, even recognizing the "tunnel" design of ArcelorMittal's reheat furnace. The Illinois EPA contacted both Bricmont, Inc., the supplier of the tunnel furnace, and Bloom Engineering, the supplier of the burners now in use at the furnace, to confirm that ultra low NO_x burners can be used at the Riverdale facility. Based on this information, the burners now in use at ArcelorMittal were designed in the 1980s and are not considered an "advanced NO_x control technology" as ArcelorMittal claims.

In its review of control technologies that are appropriate for tunnel reheat furnaces, the Illinois EPA performed a survey of NO_x emission limits for similar furnaces constructed in other states in recent years. From the survey, seven such furnaces have recently been permitted with NO_x emission limits ranging from 0.03 lb/mmBtu to 0.10 lb/mmBtu. Ultra low NOx burners were the most commonly selected control technology for these furnaces. If ArcelorMittal's furnaces were using ultra low NOx burners, as claimed, the Illinois EPA believes that the emissions from the furnaces would be at the same level as other similar furnaces. Based on this survey, the Illinois EPA proposes to amend the emission limit for recuperative reheat furnaces combusting natural gas from 0.05 lb/mmBtu to 0.09 lb/mmBtu.

ConocoPhillips Company

The Illinois EPA and ConocoPhillips Company ("ConocoPhillips") have continued a dialogue in discussing issues raised by the rulemaking proposal and have reached agreement on these issues. As to the issue of "replacement units" in the context of an emissions averaging plan, the Illinois EPA agrees with ConocoPhillips that it may consider the BEU-HM3 unit as a replacement unit for the BEU-HM1 and BEU-HM2 heaters, which are scheduled to be shut

down in 2009. Furthermore, the Illinois EPA has proposed amendatory provisions in the Second Motion to Amend Rulemaking Proposal that was filed along with these post-hearing comments so as to clarify the term "replacement unit." According to ConocoPhillips, the replacement heater for BEU-HM1 and BEU-HM2 will be a single heater, BEU-HM3, of the same approximate size as the combined heat input for the two heaters. ConocoPhillips indicates that the design is approximately 10% larger to accommodate additional heat input required by federal regulations, and the new unit will have ultra-low NO_x burners that will perform significantly better than the emissions limitation set forth under the proposal. It is the Illinois EPA's opinion that the replacement heater is used for the same purpose and has a substantially equivalent process capacity of the units that are being replaced.

As to the Steam Methane Reformer ("SMR") located at the Wood River Refinery, the Illinois EPA is in agreement with ConocoPhillips that the definition of the term "process heater," as defined in Section 211.5195, does not encompass the SMR. In the Illinois EPA's opinion, the SMR does not "indirectly transfer heat to a process fluid or a heat transfer medium other than water."

As to the CEMS requirements under the proposal, ConocoPhillips has indicated that the installation of CEMS on all affected units will add significantly to the costs to comply with this proposal. As a result, the Illinois EPA has included provisions in its Second Motion to Amend Rulemaking Proposal to allow for the use of a predictive emission monitoring system as an alternative to CEMS. Finally, additional issues that were resolved are further reflected in the Illinois EPA's Second Motion to Amend Rulemaking Proposal and include amendments to the emissions averaging plan provisions.

United States Steel Corporation

The Illinois EPA has also continued discussions with US Steel and reached agreement on its issues under this rulemaking proposal. An ancillary benefit of US Steel's coke oven gas desulfurization unit is that in addition to removing sulfur compounds from the coke oven gas, it also removes hydrogen cyanide, which reduces fuel NO_x in coke oven gas. US Steel has provided the Illinois EPA with its best estimate as to the level of hydrogen cyanide that remains in the coke oven gas after the coke oven gas passes through the desulfurization unit. This estimate is 130 parts per million. The proposed emissions limitations for industrial boilers combusting a combination of natural gas, coke oven gas, and blast furnace gas and recuperative reheat furnaces combusting a combination of natural gas and coke oven gas are derived from this estimate. The Illinois EPA recognizes the fact that once all units are in operation, there is a possibility that the emissions limitations may require adjustment, which would be the subject of a future rulemaking. Amendatory provisions encompassing the issues affecting US Steel in this rulemaking proposal are reflected in the Illinois EPA's Second Motion to Amend Rulemaking Proposal, which was filed with these post-hearing comments.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

By: _____

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DATED: March 23, 2009

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THIS FILING IS SUBMITTED ON RECYCLED PAPER

STATE OF ILLINOIS)
) **SS**
COUNTY OF SANGAMON)
)

CERTIFICATE OF SERVICE

I, the undersigned, an attorney, state that I have served electronically the attached SECOND MOTION TO AMEND RULEMAKING PROPOSAL and POST-HEARING COMMENTS OF THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,

upon the following person:

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

and electronically to the following persons:

SEE ATTACHED SERVICE LIST

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY,

Gina Roccaforte
Assistant Counsel
Division of Legal Counsel

Dated: March 23, 2009

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