ILLINOIS POLLUTION CONTROL BOARD August 18, 2011

IN THE MATTER OF:)	
NITROGEN OXIDES EMISSIONS, AMENDMENTS TO 35 ILL. ADM. CODE 217))	R11-24 (Rulemaking - Air)
IN THE MATTER OF:)	
ILLINOIS ENVIRONMENTAL)	R11-26
REGULATORY GROUP'S EMERGENCY)	(Rulemaking - Air)
RULEMAKING, NITROGEN OXIDES)	(Consolidated)
EMISSIONS: AMENDMENTS TO 35 ILL.)	
ADM. CODE PART 217)	

Adopted Rule. Final Opinion and Order.

OPINION AND ORDER OF THE BOARD (by G.L. Blankenship):

The Board today adopts amendments to its air pollution regulations. *See* 35 Ill. Adm. Code Part 217. The adopted amendments will become final upon filing with the Secretary of State. Today's order also grants the motion filed by the Illinois Environmental Protection Agency (Agency) to correct the transcript of the Board's June 28, 2011 hearing.

The Agency initiated this proceeding by filing a rulemaking proposal on April 4, 2011. The proposal modifies the date of compliance with the requirements of various Subparts of 35 Ill. Adm. Code Part 217, Nitrogen Oxides (NO_x) Emissions (herein NO_x RACT Rule or Rule), which contain provisions relating to the control of nitrogen oxides emissions from various source categories, including emission units within these 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. The rulemaking was filed pursuant to Sections 27 and 28 of the Environmental Protection Act (Act) (415 ILCS 5/27 and 28 (2010)) and Section 102.202 of the Board's procedural rules (35 Ill. Adm. Code 102.202).

On April 7, 2011, the Board adopted its first-notice opinion and order in R11-24 without commenting on the substantive merits of the Agency's proposal. *See* 35 Ill. Reg. 6770 (Apr. 22, 2011).

On April 22, 2011, the Illinois Environmental Regulatory Group (IERG) filed an emergency rulemaking proposing identical changes to those in R11-24. This emergency rulemaking proposal was docketed by the Board as R11-26. On May 19, 2011, the Board denied the motion for emergency rule and on the Board's own motion consolidated R11-26 with R11-24.

After conducting two public hearings in this matter and considering the entire record, the Board on July 21, 2011, proposed the amendments to its air pollution regulations for second notice review by the Joint Committee on Administrative Rules (JCAR). JCAR, at its meeting on August 16, 2011, issued a certificate of no objection to the Board's proposal.

In this opinion, the Board first provides the procedural history of this rulemaking. The Board next addresses the Agency's motion to correct the transcript of the Board's June 28, 2011 hearing. The Board then summarizes the rulemaking proposal followed by a summary of the testimony and public comments filed in this rulemaking. Finally, the Board discusses the rulemaking proposal.

The order following the opinion directs the Clerk to correct the transcript of the June 28, 2011 hearing and further directs the Clerk to provide for publication of the adopted rules in the *Illinois Register*.

PROCEDURAL HISTORY

On April 4, 2011, the Agency filed a rulemaking proposal to amend Part 217 of the Board's air pollution regulations, accompanied by a motion for expedited review. The proposal was docketed as R11-24. In an order dated April 7, 2011, the Board accepted the proposal for review and denied the motion for expedited review. In that same order, the Board submitted the proposal for first-notice publication in the *Illinois Register* without commenting on its substantive merits. *See* 35 Ill. Reg. 6770 (April 22, 2011).

In a letter dated April 13, 2011, the Board requested that the Department of Commerce and Economic Opportunity (DCEO) conduct an economic impact study of the Agency's rulemaking proposal. *See* 415 ILCS 5/27(b) (2008). On May 23, 2011, the Board received a response from DCEO. In a letter dated May 5, 2011, DCEO Director Warren Ribley stated that, "[a]t this time, the Department is unable to undertake such an economic impact study" and that therefore the DCEO "must respectfully decline [the Board's] request."

On April 18, 2011, the hearing officer issued an order scheduling two hearings in this rulemaking. The first hearing was scheduled for Thursday, June 2, 2011 in Chicago with prefiled testimony due on May 19, 2011. The second hearing was scheduled for Tuesday, June 28, 2011 in Edwardsville with pre-filed testimony due on June 20, 2011.

First notice of the proposed rules appeared in the *Illinois Register* on April 22, 2011. 35 Ill. Reg. 6770 (Apr. 22, 2011); *see* 5 ILCS 100/5-40(b) (2008) (establishing 45-day comment period).

On April 22, 2011, the Board received IERG's Motion for Emergency Rule and docketed it as R11-26. On May 19, 2011, the Board denied the motion for emergency rule and on its own motion consolidated R11-26 with R11-24.

On May 19, 2011, the Agency pre-filed for the first hearing the testimony of Robert Kaleel. The Board did not receive any other pre-filed testimony for the first hearing.

The first hearing took place as scheduled on June 2, 2011, in Chicago. During the hearing, the hearing officer admitted into the record one exhibit, the pre-filed testimony of Robert Kaleel (Exh. 1). The Board received the transcript of the first hearing was received by the Board on June 8, 2011 (Tr. 1).

On June 3, 2011, the Agency filed a document requested at the hearing: a letter from Cheryl L. Newton, Director of USEPA Air and Radiation Division, Region 5.

On June 6, 2011, the Board received a public comment from the Natural Resources Defense Council (NRDC) and the Sierra Club (PC1).

The Board received two filings on June 20, 2011. The first filing was the pre-filed testimony of Robert A. Messina on behalf of IERG. The second filing was on behalf of ExxonMobil Oil Corporation and contained the pre-filed testimonies of Robert Elvert, Dan Stockl and Doug Deason. The Board did not receive any other pre-filed testimonies for the second hearing.

On June 23, 2011, the Board received IERG's Motion for Reconsideration (Mot. Recon.) of the Board's May 19, 2011 Order, in which the Board denied IERG's motion for an emergency rulemaking.

The second hearing took place as scheduled on June 28, 2011 in Edwardsville. During the hearing, the hearing officer admitted four exhibits into the record: the pre-filed testimony of Robert Messina (Exh. 2), the pre-filed testimony of Robert Elvert on behalf of ExxonMobil Oil Corporation (Exh. 3), the pre-filed Testimony of Dan Stockl on behalf of ExxonMobil Oil Corporation (Exh. 4) and the pre-filed Testimony of Doug Deason on behalf of ExxonMobil Oil Corporation (Exh. 5). The Board received the transcript of the second hearing on July 8, 2011 (Tr. 2).

On July 7, 2011, the Board received the public comments of Midwest Generation, LLC (PC2).

The Board received the final comments of IERG on July 15, 2011 (PC3). On July 18, 2011, the Board received three filings. These include: Comments of Alton Steel, Inc. (PC4); Post-Hearing Comments of the Agency (PC5); and ExxonMobil's Post-Hearing Comments (PC6). Also on July 18, 2011, the Board received the Agency's motion to correct the transcript of the Board's June 28, 2011 hearing (Mot. Corr.).

On July 21, 2011, the Board adopted a second notice opinion and order for review by JCAR. JCAR, at its meeting on August 16, 2011, issued a certificate of no objection to the Board's proposed amendments.

MOTION TO CORRECT TRANSCRIPT

On July 18, 2011, the Agency filed a motion to correct the transcript of the June 28, 2011 hearing. The Agency requests that the Board make ten changes and lists the changes by page and line number in its motion. Mot. Corr. at 1.

Section 101.500(d) of the Board's procedural rules provides in pertinent part that, "[w]ithin 14 days after service of a motion, a party may file a response to the motion. If no response is filed, the party will be deemed to have waived objection to the granting of the motion, but the waiver of objection does not bind the Board or the hearing officer in its disposition of the motion." 35 Ill. Adm. Code 101.500(d). The Board has reviewed the substance of the Agency's motion to correct and, to this date, has not received any response to the Agency's motion. The Board grants the motion and directs the Clerk to correct the transcript of the June 28, 2011 hearing as requested in the Agency's motion.

SUMMARY OF THE AGENCY'S RULEMAKING PROPOSAL

Introduction

The Agency summarized its proposal as follows:

These regulations propose to modify the date for compliance with the requirements of various Subparts of 35 Ill. Adm. Code Part 217, Nitrogen Oxides Emissions, which contain provisions relating to the control of nitrogen oxides ("NO_x") emissions from various source categories, including emission units within these 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. Statement of Reasons (SR) at 1.

The Agency stated that, in 2009, the Board adopted amendments to Part 217 to satisfy the NO_x reasonably available control technology (RACT) requirements under Sections 172 and 182 of the Federal Clean Air Act (CAA). *Id.*, citing R08-19, In the Matter of: Nitrogen Oxides Emissions from Various Source Categories: Amendments to 35 Ill. Adm. Code Parts 211 and 217. The Agency noted that, on September 2, 2009 and supplemented on October 8, 2009, the Agency submitted these amendments to the United States Environmental Protection Agency (USEPA) for approval "as part of the Illinois State Implementation Plan (SIP) to satisfy the NO_x RACT requirement for the 1997 8-hour ozone and particulate matter (PM) National Ambient Air Quality Standards (NAAQS)." SR at 1-2. The Agency stated that the compliance date in those provisions is January 1, 2012 and that this submittal proposes to change that compliance date to January 1, 2015. *Id.* at 2. The Agency further stated that the proposal would amend Part 217, Nitrogen Oxides Emissions, 35 Ill. Adm. Code Part 217, under Subparts D, E, F, G, H, I and M as well as Appendix H. SR at 2.

Statement of Facts

The Agency stated that the CAA "establishes a comprehensive program for controlling and improving the nation's air quality by way of state and federal regulations." SR at 2. The Agency explained that it is USEPA's duty to "[identify] air pollutants that endanger the public health and welfare and [to formulate] the NAAQS that specify the maximum permissible concentrations of those pollutants in the ambient air under Sections 108 and 109 of the CAA." *Id.*, citing 42 USC §§ 7408-7409.

8-Hour Ozone NAAQS

The Agency noted that, under Section 107(d)(1)(A) of the CAA:

"By such date as the Administrator may reasonably require, but not later than 1 year after promulgation of a new or revised national ambient air quality standard for any pollutant under section 109, the Governor of each State shall (and at any other time the Governor of a State deems appropriate the Governor may) submit to the Administrator a list of all areas (or portions thereof) in the State" that designates those areas as nonattainment, attainment, or unclassifiable. SR at 2-3, citing 42 USC § 7407(d)(1)(A).

The Agency further explained that:

Upon promulgation or revision of a national ambient air quality standard, the Administrator shall promulgate the designations of all areas (or portions thereof) submitted under subparagraph (A) as expeditiously as practicable, but in no case later than 2 years from the date of promulgation of the new or revised national ambient air quality standard. Such period may be extended for up to one year in the event the Administrator has insufficient information to promulgate the designations. SR at 3, citing 42 USC § 7407(d)(1)(B).

The Agency noted that the USEPA revised the level of the 8-hour primary ozone NAAQS and lowered it from 0.08 parts per million (ppm) to 0.075 ppm. SR at 3. The USEPA further revised the 8-hour secondary ozone NAAQS by making identical to the revised primary standard. *Id.*, citing 73 *Fed. Reg.* 16436 (March 27, 2008). This revised standard was then challenged by various groups. SR at 3, citing <u>State of Mississippi</u>, et al. v. <u>EPA</u>, No. 08-1200 (D.C. Cir. 2008).

Based on measured violations of the revised standard during 2006 through 2008, in March, 2009, the Agency recommended to USEPA that portions of the Chicago and Metro-East metropolitan areas be designated as nonattainment for the revised 8-hour ozone NAAQS. SR at 3, citing attached Letter to Bharat Mathur, Acting Regional Administrator, USEPA Region 5, (March 9, 2009). These boundaries were the same as those established pursuant to the 1997 revisions of the ozone NAAQS with the exception of Jersey County. SR at 3.

In September, 2009, the USEPA informed the United States Court of Appeals for the District of Columbia that it would be reconsidering the 2008 8-hour ozone NAAQS. SR at 4, citing State of Mississippi, et al. v. EPA, No. 08-1200, (D.C. Cir. 2008) EPA's Revised Motion Requesting a Continued Abeyance and Response to the State Petitioner's Cross-Motion (Dec. 8, 2010). In January, 2010, "the USEPA proposed to strengthen the 8-hour primary ozone standard to a lower level within the range of 0.060 to 0.070 ppm to protect public health and the secondary standard within the range of 7 to 15 ppm-hours." SR at 4, citing 75 Fed. Reg. 2938 (Jan. 19, 2010). The Agency believed that this reconsideration "was to ensure that the standards are clearly grounded in science, protect public health with an adequate margin of safety, and protect the environment." SR at 4.

The Agency stated that these proposed standards are consistent with the Clean Air Scientific Advisory Committee's recommendations. SR at 4. The Agency noted that the USEPA has delayed its final decision on the reconsideration, moving from an initial date of August 31, 2010, to December 2010 and finally indicating July 29, 2011. *Id.*, citing State of Mississippi, et al. v. EPA, No. 08-1200, (D.C. Cir. 2008) *EPA's Revised Motion Requesting a Continued Abeyance and Response to the State Petitioner's Cross-Motion* (Dec. 8, 2010). The Agency contended that this would "reestablish NO_x RACT requirements in areas designated as nonattainment (moderate and above) for the revised ozone standard." SR at 4. The Agency believed that new nonattainment areas will be designated in 2012. *Id.* As a result, the Agency "expect[ed] that NO_x RACT will likely be required by the beginning of the 2015 ozone season." *Id.*

On July 29, 2010, the Agency requested the USEPA "for a NO_x RACT waiver for the 1997 8-hour ozone standard for the Illinois ozone nonattainment areas based upon quality-assured ozone monitoring data for 2007 through 2009, which demonstrate that the 1997 8-hour ozone NAAQS has been attained in the Chicago-Gary-Lake County, IL-IN and St. Louis, MO-IL areas without the implementation of NO_x RACT in the Illinois portions of these areas." SR at 5. The Agency further requested that the USEPA "consider the NO_x RACT amendments that were promulgated by the Board in 2009 for approval as NO_x RACT in the Illinois SIP under the revised ozone standard that USEPA is currently considering." *Id.*, citing 75 *Fed. Reg.* 76332 (Dec. 8, 2010). On December 8, 2010, the USEPA proposed to approve the waiver. *Id.* On February 22, 2011, the USEPA approved the Agency's NO_x RACT waiver request for the 1997 8-hour ozone standard for the Illinois ozone nonattainment areas. SR at 5, citing 76 *Fed. Reg.* 9655 (Feb. 22, 2011).

PM_{2.5} NAAQS

The Agency stated that, on July 18, 1997, the USEPA "revised the NAAQS for [Particulate Matter (PM)] to add new standards for fine particles, using PM_{2.5} as the indicator, and established primary annual and 24-hour standards for PM_{2.5}." SR at 5-6, citing 62 Fed. Reg. 38652 (July 18, 1997). A subsequent October, 2006, USEPA review of the NAAQS for PM resulted in a strengthening of the 24-hour PM_{2.5} standard from 65 micrograms per cubic meter (μ g/m³) of air to 35 μ g/m³ of air, but retained the annual PM_{2.5} standard at 15 μ g/m³ of air. SR at 6, citing 71 Fed. Reg. 61144 (Oct. 17, 2006).

The Agency noted that there were two areas – Chicago-Gary-Lake County, IL-IN (Chicago Area) and St. Louis, MO-IL (St. Louis Area) – designated as nonattainment for the 1997 annual PM_{2.5} standard at the time of the Board's promulgation of the amendments to Part 217 in R08-19. SR at 6. In November, 2009, the USEPA determined that the Chicago Area attained the 1997 PM_{2.5} NAAQS. *Id.*, citing 74 *Fed. Reg.* 62243 (Nov. 27, 2009). Recently the USEPA proposed that the St. Louis Area has also attained such standard. SR at 6, citing 76 *Fed. Reg.* 12302 (March 7, 2011).

The Agency stated that, in 2009:

several parties challenged the revised NAAQS for PM and the United States Court of Appeals for the District of Columbia Circuit remanded the primary annual PM_{2.5} standard to USEPA for reconsideration, because USEPA failed to explain adequately why an annual level of $15 \,\mu\text{g/m}^3$ of air is "requisite to protect the public health," including the health of vulnerable subpopulations, while providing "an adequate margin of safety." SR at 6-7, citing <u>American Farm Bureau Federation v. EPA</u>, 559 F.3d 512 (D.C. Cir. 2009).

The Agency remarked that the USEPA is presently reviewing the NAAQS for PM as the USEPA is required to periodically review and revise the NAAQS. SR at 7. The Agency believed that, similar to how the USEPA has proposed to strengthen the 8-hour primary ozone standard, it is probable that the USEPA will strengthen the PM standard. *Id*.

Transport of Emissions

The Agency contended that emissions from sources in upwind states contribute significantly to nonattainment in, or interference with maintenance by, a downwind area with respect to the NAAQS. SR at 7. The Agency believed that, with the strengthening of the NAAQS, nonattainment designations will follow. *Id.* Accordingly, NO_x RACT requirements in Illinois, by reducing NO_x emissions in the Chicago area, will reduce impacts upon downwind areas in achieving strengthened NAAQS. *Id.*

Clean Air Act Requirements

The Agency stated that "States are primarily responsible for ensuring attainment and maintenance of NAAQS once USEPA has established them." SR at 8. The Agency explained that, under Section 110 of the CAA and related provisions, States are to submit for USEPA approval SIPs that provide for the attainment and maintenance of such standards through control programs directed to sources of the pollutants involved. *Id.*, citing 42 USC § 7410. The Agency noted that the additional requirements include Section 172 of Subpart 1, Nonattainment Areas in General and Section 182 of Subpart 2, Additional Provisions for Ozone Nonattainment Areas under Part D, Plan Requirements for Nonattainment Areas. SR at 8.

Purpose and Effect of the Proposal

The Agency stated that:

[t]his rulemaking proposal has been prepared to extend the compliance date for the requirements under Subparts D, E, F, G, H, I, and M of Part 217 from January 1, 2012, to January 1, 2015, and as such, 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 NAAQS. SR at 8.

The Agency stated that nonattainment designations trigger requirements under the CAA for adopting regulations that reduce emissions sufficiently to demonstrate attainment of the standards. SR at 8. The Agency contended that States with nonattainment areas are required to submit, in part, SIPs that provide for the adoption of Reasonably Available Control Measures (RACM) for stationary sources in all nonattainment areas as expeditiously as possible. *Id.*, citing 42 USC § 7502(c)(1).

The Agency went on to explain that a subset of RACM are the RACT requirements. SR at 9. The Agency defined RACT 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." *Id.*, citing 44 *Fed. Reg.* 53762 (September 17, 1979).

The Agency explained that the CAA requires States to adopt RACT rules for all areas designated nonattainment for ozone and classified as moderate or above. SR at 9-10, citing 42 USC § 7511a(b)(2). In addition, the Agency stated that "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." SR at 10, citing 42 USC § 7511a(f). The Agency also noted that the CAA defines a "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." SR at 11, citing 42 USC § 7602.

The Agency contended that all of 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 ozone nonattainment areas classified as moderate and above. SR at 11. The Agency stated that the NO_x RACT regulations promulgated by the Board in 2009 require major stationary sources located in the nonattainment areas in Illinois to comply with the NO_x requirements beginning January 1, 2012. *Id.* at 11-12.

The Agency, however:

recognizes that the waiver of the NO_x RACT requirement to meet the 1997 8-hour ozone standard, the reconsideration of the 2008 8-hour ozone standard, and the USEPA's delay in adopting the 8-hour ozone standard revision proposed in 2010 results in a situation where the existing NO_x RACT regulations, absent an underlying federal requirement to implement these rules at this time, impose

compliance requirements upon the regulated community prior to when they will be necessary under the CAA. SR at 12.

The Agency therefore proposed to extend the compliance date from January 1, 2012, to January 1, 2015, "so as to fulfill the NO_x RACT requirements under the CAA for the 8-hour ozone standard that the USEPA is currently considering." SR at 12. The Agency also believed that "a strengthening of the PM standard will also likely yield NO_x RACT requirements upon Illinois for designated nonattainment areas." *Id*.

Geographic Regions and Sources Affected

The Agency stated that the two regions subject to the proposed regulations for affected sources are the two Illinois nonattainment areas, *i.e.* the Chicago-Gary-Lake County, IL-IN designated area and the St. Louis, MO-IL designated area. SR at 12. The Agency further stated that the proposal:

is expected to affect all sources that are located in those nonattainment areas that emit or have the potential to emit NO_x in an amount equal to or greater than 100 tons per year and any industrial boiler, process heater, glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, aluminum reverberatory or crucible furnace, or fossil fuel-fired stationary boiler within such sources that emits NO_x in an amount equal to or greater than 15 tons per year and equal to or greater than 5 tons per ozone season and subject to the provisions of the regulations. SR at 12-13.

The Agency further listed the sources it expects to be affected by the proposed rulemaking in Attachment A to its Statement of Reasons. SR at 13.

Technical Feasibility and Economic Reasonableness

The Agency contended that the amendments to Part 217 are being proposed to extend the compliance date for NO_x requirements for a number of source categories and that the amendments do not impose any additional requirements upon affected sources. SR at 13. The Agency therefore believed that an analysis of technical feasibility and economic reasonableness is not appropriate. *Id.* The Agency noted, however, that this analysis was performed in the initial rulemaking in R08-19. *Id.* The Agency stated that, "[b]y extending the compliance date for the NO_x requirements, affected sources gain an economic benefit by delaying implementation costs and associated expenses, such as installation, monitoring, and recordkeeping and reporting costs." *Id.*

Communication with Interested Parties

The Agency stated that it engaged in communications with IERG and that the regulations were being proposed "after the interested parties have had an opportunity to review the proposal and discuss any issues with the [Agency]." SR at 13.

FIRST BOARD HEARING

The first hearing in this rulemaking proposal was held on June 2, 2010 in Chicago, Cook County. The Board received the pre-filed testimony of Robert Kaleel on behalf of the Agency. No other pre-filed testimonies were received. Additionally, the Board also received one public comment prior to the hearing (summarized in the public comments section below), filed on behalf of the Natural Resource Defense Council and the Sierra Club.

Pre-Filed Testimony of Robert Kaleel

The Agency submitted the pre-filed Testimony of Robert Kaleel (Exh. 1) to the Board on May 19, 2011. Robert Kaleel is the manager of the Air Quality Planning Section in the Bureau of Air at the Agency. Exh. 1 at 1. While working for the Agency, Mr. Kaleel has been closely involved in developing Illinois' SIPs to address fine particulate matter (PM_{2.5}) and ozone nonattainment areas. *Id.*

Mr. Kaleel claimed that the proposed regulations modify the compliance date for some requirements of Subparts of 35 Ill. Adm. Code Part 217, Nitrogen Oxide Emissions. Exh. 1 at 1. Mr. Kaleel stated that the provisions relate to control of nitrogen oxides (NO_x) emissions from various categories. *Id.* Mr. Kaleel further alleged that the Board adopted the 2009 provisions to improve air quality for ozone in the Chicago and Metro-East nonattainment areas. *Id.* Mr. Kaleel believed that the 2009 provisions were intended to satisfy the NO_x reasonably available control technology (RACT) requirement under Sections 172 and 182 of the Clean Air Act (CAA). *Id.*

Mr. Kaleel stated that the amendatory provisions set forth a compliance date of January 1, 2012, while this filing proposes to change the compliance date to January 1, 2015. Exh. 1 at 1-2. Mr. Kaleel additionally stated that when the Board promulgated the amendments to Part 217, two nonattainment areas, Chicago and Metro-East, for the 1997 8-hour ozone standard existed in Illinois. *Id.* at 2. Mr. Kaleel claimed that both areas are part of multi-state nonattainment areas, from which the emissions emanating contribute to the nonattainment of the ozone standard in downwind areas. *Id.*

Mr. Kaleel stated that, before the Board adopted the 2009 provisions, monitoring data was collected from 2007 through 2009 which show that both the 1997 8-hour ozone National Ambient Air Quality Standard (NAAQS) and the 1997 annual PM_{2.5} NAAQS were attained in Chicago and the Metro-East. Exh. 1 at 2. Mr. Kaleel further claimed that the Agency has submitted a request to re-designate the nonattainment areas to attainment areas for both pollutants, ozone and NO_x, in Chicago and the Metro-East. *Id.* Mr. Kaleel claimed that the Agency, in order to expedite the re-designation process, submitted a request with the USEPA on July 29, 2010 for a NO_x RACT waiver for the 1997 8-hour ozone standard for the nonattainment areas. *Id.* Mr. Kaleel further stated that the USEPA approved the Agency's NO_x RACT waiver request. *Id.*

Mr. Kaleel believed that the Agency will require implementation of the 2009 provisions even though the provisions were unnecessary to meet the 1997 ozone and $PM_{2.5}$ air quality

standards, because the USEPA proposed to revise the 8-hour primary ozone NAAQS in 2010. Exh. 1 at 2. According to Mr. Kaleel, the new standards for 8-hour primary ozone NAAQS would be lowered from the 1997 standard, 0.08 parts per million (ppm), to between 0.060 and 0.070 ppm. *Id.* Although these proposed standards are not finalized, Mr. Kaleel has stated that the USEPA has announced that it intends to finalize the proposed standards by July 2011. *Id.* Mr. Kaleel further claimed that several areas in the Chicago and Metro-East nonattainment areas will not be able to meet these proposed standards. *Id.* In Mr. Kaleel's opinion, the areas that cannot meet the proposed standards will have to be designated as nonattainment areas, meaning that NO_x RACT will be required for the nonattainment areas designated as moderate or above. *Id.* at 3.

Mr. Kaleel noted that the USEPA is reviewing the NAAQS for $PM_{2.5}$ and intends to lower the standard in 2011. Exh. 1 at 3. Mr. Kaleel believed that a reduction of NO_x emissions in the Chicago and Metro-East nonattainment areas will be necessary to meet future revised NAAQS and any future obligations for NO_x RACT required by the CAA. *Id.*

SECOND BOARD HEARING

The Board received four pre-filed testimonies prior to the second hearing held on June 28, 2011 in Edwardsville, Madison County. The first is the Pre-Filed Testimony of Robert A. Messina, filed on behalf of IERG. The next three pre-filed testimonies were filed on behalf of ExxonMobil Oil Corporation and include the Pre-Filed Testimony of Robert Elvert, the Pre-Filed Testimony of Dan Stockl and the Pre-Filed Testimony of Doug Deason.

Pre-Filed Testimony of Robert A. Messina

On June 20, 2011, the Illinois Environmental Regulatory Group (IERG) submitted the pre-filed testimony of Robert A. Messina (Exh. 2). Mr. Messina is the executive director for IERG. Exh. 2 at 1. Mr. Messina claimed that IERG is involved in the rulemaking for three reasons. *Id.* at 2. First, Mr. Messina stated that the Illinois NO_x RACT rules are unnecessary because of the NO_x waiver. *Id.* Second, there is uncertainty about whether the current NO_x RACT rules will satisfy future ozone requirement or PM_{2.5} standards according to the Clean Air Act. *Id.* Third, it is uncertain if "future NO_x RACT rules will be required." *Id.* For these three reasons, Mr. Messina believed that the Agency should not require compliance with the current NO_x RACT rules, which would result in increased expenditures. *Id.*

Background

Mr. Messina's testimony offered background on the original Board rulemaking to adopt NO_x RACT rules. Exh. 2 at 2.; *See also* In the Matter of: Nitrogen Oxides Emissions from Various Source Categories; Amendments to 35 Ill. Adm. Code Parts 211 and 217, R08-19. Mr. Messina noted that IERG was involved in the R08-19 rulemaking. *Id.* Mr. Messina claimed that at the conclusion of the R08-19 proceedings, IERG was concerned that the Board's adopted rules for RACT went beyond the federal requirement for the 1997 8-hour ozone and 1997 PM_{2.5} NAAQS. Mr. Messina further claimed that, at that time, IERG felt the compliance date would not afford adequate time for affected parties to comply. *Id.* Mr. Messina stated that IERG's

concerns were lessened when the Agency stated that R08-19 would satisfy future NO_x RACT requirements for ozone and PM_{2.5} NAAQS. *Id.* at 3, citing First-Notice Comments of IERG, R08-19, at 3-5 (Jul. 6, 2009).

Mr. Messina noted that IERG first learned of the Agency's July 29, 2010 NO_x RACT waiver request on December 8, 2010, when the USEPA proposed to grant the waiver. Exh. 2 at 3, citing 75 Fed. Reg. 76332. Mr. Messina stated that IERG then entered into a series of discussions with the Agency regarding an extension of the compliance dates contained in the Illinois NO_x RACT rules. Exh. 2 at 3. Mr. Messina contended that the general impression was that "no formal action could be taken until the USEPA's approval of the NO_x RACT waiver to ensure that the request for extension would be appropriate, in that it would not trigger non-compliance with those federal requirements." *Id.* Mr. Messina noted that the Agency expressed its intentions to work with the regulated community in a letter dated January 12, 2011. *Id.*, citing In the Matter of: Illinois Environmental Regulatory Group's Emergency Rulemaking, Nitrogen Oxides Emissions: Amenments to 35 Ill. Adm. Code Part 217, R11-26 (April 21, 2011), Attachment B (letter from Laurel L. Kroack, Chief, Bureau of Air, to Mr. Robert A. Messina, Executive Director, IERG).

Mr. Messina stated that the USEPA finalized the NO_x RACT waiver on February 23, 2011. Exh. 2 at 3, citing 76 *Fed. Reg.* 9655 (Feb. 23, 2011). The Agency and IERG's rulemakings were then filed with the Board. Exh. 2 at 3-4.

Proposed January 1, 2015 Compliance Date

Mr. Messina noted that both the Agency's and IERG's rulemaking proposals would extend the compliance date of the Illinois NO_x RACT rules to January 1, 2015. Exh. 2 at 4. Mr. Messina stated that this date was agreed upon by the Agency and IERG and referenced the testimony of Robert Kaleel on behalf of the Agency in support. *Id.*, citing Tr. at 9 (June 2, 2011).

Mr. Messina explained that, as stated by Mr. Kaleel, any future NO_x RACT requirement will stem from the revised ozone NAAQS but that there is uncertainty as to when that NO_x RACT will be required. Exh. 2 at 4. Mr. Messina stated that a number of options were discussed between IERG and the Agency, including: revoking the NO_x rules entirely, extending the compliance date to an unspecified date contingent on future federal requirements, or choosing a fixed date with the possibility of revisiting the compliance date issue if federal action on a revised ozone NAAQS is delayed or substantially different than expected. *Id*.

Mr. Messina noted that IERG's members "deemed all of the afore-mentioned options beneficial to the regulated community at-large" but that a fixed date was preferred by the Agency. Exh. 2 at 5. Mr. Messina explained that IERG's support of this position is not intended to convey that it is the ideal solution for all IERG members but that it is the solution which was most likely to quickly be adopted. *Id*.

Future RACT Requirements

Mr. Messina testified that "it makes little sense to have sources spend money now to comply with rules that will be changing in the near future," as the Agency has already stated that the current Illinois NO_x RACT rules require revisions to be federally approvable. Exh. 2 at 5. Mr. Messina explained that the potential for money to be wasted is a "very real concern." *Id*.

Mr. Messina then offered a number of points in "preemptive response" to potential Board concerns. Exh. 2 at 5. Mr. Messina stated that the USEPA "has formally determined that all areas of Illinois have attained both the 1997 ozone and the PM_{2.5} standards." *Id.*, citing 75 *Fed. Reg.* 12088 (March 12, 2010) (for Chicago ozone); 76 *Fed. Reg.* 33647 (June 9, 2011) (for Metro-East ozone); 74 *Fed. Reg.* 62243 (for Chicago PM_{2.5}); 76 *Fed. Reg.* 29652 (May 23, 2011) (for Metro-East PM_{2.5}). Exh. 2 at 5. Mr. Messina further testified that "[w]ith the approval of Illinois' NO_x RACT waiver, [the USEPA] has acknowledged that those rules are not necessary to meet current air quality standards, since the standard has already been attained." *Id.*, citing 76 *Fed. Reg.* 9655. Mr. Messina stated that Mr. Kaleel's testimony at hearing noted that all areas of Illinois currently meet the 2008 ozone standard, although USEPA has chosen to not implement that standard as its reconsideration is pending. Exh. 2 at 6. Lastly, Mr. Messina stated that:

[t]he extension of the compliance date should have very little environmental impact, as the current compliance date requiring any potential emissions reductions has not yet occurred, although for those sources that have already made changes to their units to ensure compliance (i.e. installation of low-NO_x burners or other controls) some air quality improvement should continue to be realized. Exh. 2 at 6.

Mr. Messina concluded by encouraging the Board to take action as soon as possible in order for subject sources to gain some economic benefit as a result of the compliance date extension. Exh. 2 at 6.

Pre-Filed Testimony of Robert Elvert

On June 6, 2011, ExxonMobil Oil Corporation (ExxonMobil) submitted the pre-filed testimony of Robert Elvert (Exh. 3) for the June 28, 2011 hearing conducted by the Board. Robert Elvert is the State Regulatory Advisor for the Midwest Region of ExxonMobil. Exh. 3 at 1. Mr. Elvert has included in his testimony a brief history of his employment at ExxonMobil and a summary of the ExxonMobil Joliet Refinery's operations.

Compliance Deadline

According to Mr. Elvert, ExxonMobil is concerned about an indeterminate deadline for which NO_x RACT will be required due to the uncertainty regarding a new ozone standard. Exh. 3 at 3. Mr. Elvert pointed to the Agency's testimony at the June 2, 2011 hearing to illustrate his view:

We believe the date that NO_x RACT would ultimately be required is uncertain right now. The date of implementation of NO_x RACT is dependent on several actions on the part of USEPA and none of those actions have happened yet. Primarily, what needs to happen is USEPA needs to finalize the ozone air quality standard that they proposed in January 2010 . . . Since EPA hasn't acted on the ozone standard yet, we don't know exactly what the date will be. What we put in our statement of reasons is just our expectation of EPA's schedule based on public statements that EPA has made. Exh. 3 at 3, citing Tr. 1 at 6-7.

Mr. Elvert cited to the Agency's testimony and claimed that currently, "the NO_x RACT rule is neither mandated by federal law nor approvable by USEPA as RACT." Exh. 3 at 3 (citing Tr. 1 at 10-11, 19-20). Mr. Elvert argued the compliance deadline should be extended to allow for facilities to delay implementation of RACT, until RACTs are required. *Id.*

Mr. Elvert stated that ExxonMobil has already incurred costs to meet the requirements of the Rule and that, while the January 1, 2015 proposed compliance date does provide some relief for emission units subject to the current January 1, 2012 deadline, it does not provide relief for ExxonMobil's emission units that are subject to the compliance deadline in Appendix H of the Rule. Exh. 3 at 4. Mr. Elvert argued that ExxonMobil should not be required to spend millions of dollars to comply with the Rule, because the "Rule is not approvable by USEPA and RACT may not be required under the future standard." *Id.* In accordance with ExxonMobil's petition for variance pending before the Board, Mr. Elvert stated that ExxonMobil is requesting an extension to the compliance date, moving its compliance date to spring 2019. *Id.* According to Mr. Elvert, this compliance deadline will coincide with the Refinery five- to six-year cycle for maintenance turnarounds. *Id.* at 5. Mr. Elvert further stated that unplanned turnarounds to install controls on the facility's process heaters could disrupt fuel supply throughout the Midwest. *Id.*

Discussions with the Agency

Mr. Elvert's testimony then summarized the discussions that ExxonMobil has had with the Agency during the initial proceeding to adopt the NO_x RACT Rule about receiving an extension from the January 1, 2015 compliance deadline. Exh. 3 at 5. Mr. Elvert indicated that ExxonMobil and the Agency conversed on March 7, 2011, March 10, 2011, April 14, 2011, and May 9, 2011 about the compliance deadline and implementation of a future ozone standard. *Id.* Mr. Elvert stated that, during the discussions, ExxonMobil presented its concerns about the negative financial impact of the NO_x RACT rule on ExxonMobil. *Id.* at 6. Mr. Elvert claimed that the Agency then raised the idea of evaluating the implementation of alternative projects at the Refinery to reduce comparable NO_x emissions. *Id.*

Mr. Elvert claimed that ExxonMobil evaluated possible alternative emission reduction projects and determined none were technically feasible and cost effective for the Refinery. *Id.* Mr. Elvert added that ExxonMobil asked the Agency if ExxonMobil could pursue a construction permit to implement a NO_x control strategy, technically identified as the Selective Catalytic Reduction Unit (SCR unit), in accordance with 35 Ill. Adm. Code 217.152(c). Exh. 3 at 6. According to Mr. Elvert's testimony, the Agency did not consider this an option. *Id.* Mr. Elvert

also added that ExxonMobil asked the Agency if ExxonMobil could seek a variance from the NO_x RACT rule's December 21, 2014 deadline. *Id.* As stated earlier, Mr. Elvert pointed out that ExxonMobil has filed a petition for variance with the Board. *Id.* at 7.

Delay in Informing the Public

Mr. Elvert's testimony contended that the Agency delayed informing the public of the waiver request from the USEPA 1997 8-hour ozone standard, which was submitted on July 29, 2010. Elvert at 7. According to Mr. Elvert, ExxonMobil did not know about the NO_x RACT waiver until the USEPA proposed to approve the Agency's request on December 8, 2010. *Id.* Mr. Elvert claimed that notifying the regulated community prior to submitting the waiver request would have: (1) allowed ExxonMobil to work with the Agency prior to the waiver request's submission, (2) generated dialogue with the regulated community and (3) given time for ExxonMobil to evaluate the financial impact of complying with the NO_x RACT rule. *Id.* at 8-9. Mr. Elvert acknowledged that the Agency was not required to notify the public before submitting the waiver request with the USEPA. *Id.* at 8. Yet, Mr. Elvert pointed out that the Agency had several opportunities to notify the public during the Agency's seminars that provided air regulatory updates. *Id.* at 7-8.

NO_x Reductions

Mr. Elvert's pre-filed testimony lastly discussed whether NO_x RACT requirements would be triggered for the Chicago area if the area is designated attainment or marginal attainment. Mr. Elvert offered two reasons for why NO_x RACT may not be required. Exh. 3 at 9. First, several coal-fired electrical generating units not operated by ExxonMobil are expected to shut down. *Id.* Second, air quality in Chicago is expected to improve when Corporate Average Fuel Economy standards are implemented for mobile sources. *Id.* at 9-10. In addition to these two reasons, Mr. Elvert believed that construction of the SCR unit at the Refinery could result in the Chicago area being classified as marginal if the area is designated as nonattainment. *Id.* at 10.

Mr. Elvert concluded by stating that the compliance deadline for the NO_x RACT rule must be extended "[i]n order to postpone compliance with the Rule at this time and to stop the expenditure of resources on unnecessary projects[.]" Exh. 3 at 10. Mr. Elvert also noted that it is imperative that the compliance deadline for the Appendix H units be extended until the next scheduled turnaround "due to the uncertainty surrounding the issuance and implementation of a new ozone standard[.]" *Id*.

Pre-filed Testimony of Dan Stockl

On June 6, 2011, ExxonMobil submitted the pre-filed testimony of Dan Stockl (Exh. 4) for the June 28, 2011 hearing conducted by the Board. Mr. Stockl is a Project Development Group Leader at the Refinery and manages the Refinery's large capital investments. Exh. 4 at 1.

Project Development

Mr. Stockl's testimony summarized how ExxonMobil develops projects. Exh. 4 at 1-2. Mr. Stockl characterized ExxonMobil's approach to regulatory projects as a three step process including: (1) discussion phase that coincides with the proposed rulemaking, (2) rulemaking stage where it works with the Agency to develop the rule and evaluates plans until the rulemaking is final and (3) the official planning stage in response to the rulemaking. *Id.* Mr. Stockl then added that, once a project objective is chosen, several options including operational changes and capital investment approaches are explored to meet the objective. *Id.* at 2. Mr. Stockl further pointed out that ExxonMobil then chooses the optimum solution where scope and costs are sufficiently defined before the project is funded by the corporation. *Id.* Mr. Stockl believed that "the typical timeline for a project of the size and complexity of the Refinery's NO_x RACT project is 3-1/2 years, from the initiation of formal planning through startup." *Id.*

Cost of Compliance

Mr. Stockl's testimony offered the capital expenses that ExxonMobil has incurred and may incur in response to the NO_x RACT rule's deadlines. Exh. 4 at 2-3. Mr. Stockl stated that ExxonMobil has already incurred \$2,000,000 in capital in complying with the January 1, 2012 deadline. *Id.* at 2. Mr. Stockl also stated that the total cost of compliance for the 2012 deadline is an estimated \$2,400,000. *Id.* Mr. Stockl added that ExxonMobil has incurred \$700,000 in development costs and an additional \$500,000 to comply with the NO_x RACT rule's 2014 deadline. Mr. Stockl claimed that ExxonMobil anticipates incurring an additional \$8,600,000 by the first half of 2012 to comply with the December 31, 2014 deadline. Mr. Stockl estimated that the total expenditures for compliance will amount to \$25,700,000.

Mr. Stockl concluded by requesting an extension to the compliance date, because the NO_x RACT rule is "not federally required, not approvable as RACT, and there is uncertainty as to whether RACT will be required under the new ozone standard[.]" *Id.* at 3. Mr. Stockl noted that an extension "is necessary in order to delay ExxonMobil's considerable investments in controls until such time they are required and ExxonMobil has more certainty as to the RACT requirements for the new standard." *Id.*

Pre-filed Testimony of Doug Deason

On June 6, 2011, ExxonMobil submitted the pre-filed testimony of Doug Deason (Exh. 5) for the June 28, 2011 hearing conducted by the Board. Mr. Deason's testimony started by summarizing the history of the NO_x RACT rule. Exh. 5 at 2.

Mr. Deason claimed that, according to the Agency, the NO_x RACT rule was prepared to satisfy Illinois' SIP obligation under Sections 172 and 182 of the CAA for "major stationary sources of NO_x in areas designated as nonattainment with respect to the [1997] 8-hour ozone and PM_{2.5} NAAQS." *Id.* at 2 (quoting Statement of Reasons, <u>In the Matter of Nitrogen Oxides Emissions from Various Source Categories, Amendments to 35 Ill. Adm. Code Parts 211 and 217</u>, R08-19 at 5 (May 18, 2011)). Mr. Deason acknowledged that the Agency submitted a NO_x RACT waiver from the USEPA for the 1997 8-hour standard requirements. *Id.* at 2-3 (citing

<u>Letter from Illinois EPA to EPA</u> (July 29, 2010)). Mr. Deason stated that the USEPA approved the Agency's waiver request on February 22, 2011. *Id.* at 3. According to Mr. Deason, the waiver of the NO_x RACT renders the rule unnecessary, because both the Agency and the USEPA have determined that implementation of the NO_x RACT will not be required to attain the 1997 ozone standard. *Id.*

Mr. Deason also pointed out that the Agency, during the hearing held on June 2, 2011, testified that "there is not a federal mandate for NO_x RACT." Exh. 5 at 3, citing Tr. 1 at 19-20. Mr. Deason argued that the proposed January 1, 2015 deadline is premature, because the NO_x RACT rule is not federally required and there is uncertainty whether RACT will be necessary under the new ozone standard. *Id.*

Ozone Standard Update

Mr. Deason summarized the USEPA's public presentation on planning to implement an ozone standard. Exh. 5 at 3, citing Air Quality Actions, Update for Subcommittee on Permits/NSR/Toxics (USEPA June 7, 2011) (attached as Exhibit 2 of Mr. Deason's testimony). Mr. Deason stated that Slide 5 of the presentation indicates that "USEPA intends to issue the new ozone NAAQS revision at the end of July 2011 and will include a decision on the deadline for state designation recommendations." Exh. 5 at 3, citing Exh. 5 Exh. 2 at 5. Mr. Deason claimed that the presentation shows that the USEPA intends to issue "designation guidance," with no specific timeline and a standard implementation rule issued with the final rule at the end of July 2011. *Id.* Mr. Deason also offered a USEPA timeline for anticipated NAAQS implementation milestones, including the tentative dates for the new ozone standard. Exh. 5 at 4, citing Exh. 5 Exh. 2 at 4.

According to Mr. Deason, the USEPA has stated that designations for a future ozone standard would be effective "no later than summer 2013" and that the USEPA intends to propose an implementation rule in late July 2011. Exh. 5, citing Exh. 5 Exh. 2 at 4 and 7. Mr. Deason believed that these two factors yield uncertainty to when a compliance deadline will be set and if NO_x RACT will be needed. *Id.* Mr. Deason further added that the proposed implementation rule "should contain a proposal for the NO_x RACT milestones." *Id.* at 5.

The Timeline for Implementation of the new Ozone Standard is Uncertain

Mr. Deason's testimony offered reasons why there is an uncertain timeline for implementing the new ozone standard. Exh. 5 at 5. In his testimony, Mr. Deason included one rationale the Agency offered at the June 2, 2011 hearing, which was that:

[t]he rationale for the date . . . was based on the assumption that [US]EPA would finalize the air quality standard in 2011 and would finalize nonattainment designations in 2012.

The Clean Air Act requires for moderate, non-attainment areas that the standard be met within six years [2018] . . . To show attainment of the standard in 2018, you need three clean years of data. So backing up from '18, we were seeking the

control measures in 2015. So we would achieve clean air in 2018. Exh. 5 at 5, citing Tr. 1 at 26-27.

Mr. Deason added that the Agency has also acknowledged that the USEPA has indicated that the implementation date for NO_x RACT could be at the end of 2017. Exh. 5 at 5, citing Tr. 1 at 32. Mr. Deason claimed that the USEPA has approved some states' emission reduction programs even when completed a year prior to the attainment deadline. Exh. 5 at 5-6, citing 40 CFR § 51.908(d). Mr. Deason additionally stated that, according to Section 181(a)(5) of the CAA, an attainment date can be extended in "certain circumstances." Exh. 5 at 6, citing 41 USC § 7511(a)(5). Mr. Deason claimed that, because of these possible scenarios, the proposed January 1, 2015 deadline is "arbitrary." Exh. 5 at 6.

Mr. Deason offered four different scenarios where the Chicago area could be classified as marginal nonattainment so NO_x RACT would not be required. Exh. 5 at 6. In all four scenarios, Mr. Deason used 74 parts per billion (ppb) to classify the current conditions in the Chicago area.

Scenario 1: 70 ppb Ozone NAAQS Example. Mr Deason claimed that if the USEPA adopts an 8-hour ozone standard of 70 ppb then the Chicago area would be classified as "marginal" nonattainment. Exh. 5 at 6-7; *See also* Exh. 5 Exh. 4 at 1-2. Mr. Deason stated that in this scenario NO_x RACT would not be required. Exh. 5 at 7.

Scenario 2: 65 ppb Ozone NAAQS Example. Mr. Deason explained that this scenario would exist if the ozone standard is set at 65 ppb rather than 70 ppb and the State lowers the classification according to Section 181(a)(4) of the CAA. Exh. 5 at 7; See Exh. 5 Exh. 4 at 3. Mr. Deason claimed that if the Section 181(a)(4) exception is used, then the Chicago area would be classified as "marginal" and NO_x RACT would not be required. Exh. 5 at 7. Mr. Deason believed that, if the exception is not used, the Chicago region would be classified as "moderate" and NO_x would be required. *Id.* at 8.

Scenario 3 – three options for a possible 70 ppb ozone NAAQS. Mr. Deason established that this scenario exists if the 8-hour ozone standard of 70 ppb is adopted. Exh. 5 at 8, citing Exh. 5 Exh. 4 at 4. Mr. Deason stated that there are three possible area classification options and associated ozone concentration thresholds if the new standard is set at 70 ppb. Exh. 5 at 8, citing Exh. 5 Exh. 3 at 14. Mr. Deason claimed that, in three of five instances, the Chicago area would be classified as a "marginal" nonattainment area, requiring no NO_x RACT. *Id*.

Scenario 4 – three options for a possible 65 ppb ozone NAAQS. Mr. Deason established that this scenario exists for an 8-hour ozone standard of 65 ppb. Exh. 5 at 8, citing Exh. 5 Exh. 4 at 5. Mr. Deason noted that there are three possible area classification options and associated ozone concentration thresholds. Exh. 5 at 8., citing Exh. 5 Exh. 3 at 15. Mr. Deason similarly claimed that, in this scenario, in three of five instances the Chicago area would be classified as a "marginal" nonattainment area, requiring no NO_x RACT. Exh. 5 at 8-9.

Mr. Deason concluded his testimony by stating that, due to the uncertainty surrounding the issuance and implementation of the future ozone standard and due to the variety of USEPA actions, the proposed January 1, 2015 deadline should be revised. Exh. 5 at 9.

PUBLIC COMMENTS

The Board received six comments in this proceeding.

Comments of the Agency

On July 18, 2011, the Agency filed its post-hearing comments (PC5). The Agency addresses Clean Air Act (CAA) requirements and ExxonMobil in its comment.

Clean Air Act Requirements

The Agency stated that, in January 2010, the USEPA proposed to strengthen the 8-hour primary ozone standard to a lower level within the range of 0.060 to 0.070 parts per million (ppm) and the secondary standard to within the range of 7 to 15 ppm-hours. PC5 at 1-2, citing 75 *Fed. Reg.* 2938 (Jan. 19, 2010). The Agency noted that USEPA intends to issue a final decision on the redetermination by July 29, 2011. PC5 at 2. The Agency stated that this action will reestablish NO_x RACT requirements in areas designated as nonattainment (moderate and above) for the revised ozone standard. *Id.*

The Agency restated its position regarding the 8-hour ozone NAAQS and the $PM_{2.5}$ NAAQS. PC5 at 2-3.

The Agency again noted that, in 2009, the Board adopted amendments to Part 217 to satisfy the NO_x RACT requirements under Sections 172 and 182 of the CAA. PC5 at 4.

The Agency stated that, even absent a federal requirement, the Board and the Agency have authority to promulgate regulations that improve air quality in Illinois. PC5 at 4, citing 415 ILCS 5/4, 5, 8, 9, 27 and 28. The Agency also elaborated on the "good neighbor" provision in the CAA requiring each state to submit a SIP that prohibits emissions that adversely affect another state in the ways contemplated in the statute. PC5 at 4, citing 42 USC § 7410(a)(2)(D)(i). The Agency further noted the distinct requirements in this section that:

the SIP must prevent sources in the state from emitting pollutants in amounts which will (i) contribute significantly to nonattainment of the NAAQS in other states; (ii) interfere with maintenance of the NAAQS in other states, (iii) interfere with provisions to prevent significant deterioration of air quality in other states; or (iv) interfere with efforts to protect visibility in other states. PC5 at 4-5.

The Agency concluded that NO_x RACT requirements in Illinois, by reducing NO_x emissions in the Chicago and Metro East areas, will reduce impacts upon downwind areas in achieving strengthening NAAQS. PC5 at 5. The Agency stated that "[as] NO_x is a precursor to

PM, Illinois' NO_x RACT requirements will reduce Illinois' contribution to nonattainment in downwind states, in addition to benefitting Illinois' air quality." *Id*.

ExxonMobil Oil Corporation

The Agency noted that ExxonMobil, as explained in its Petition for Variance currently pending before the Board, is requesting an extension of the compliance date consistent with its next turnaround scheduled for Spring 2019 for ExxonMobil units listed in Part 217.Appendix H. PC5 at 5, citing Exh. 3 at 4.

The Agency stated that it has attempted to accommodate industry by extending the compliance date but contended that "it is ExxonMobil's own internal decision to delay the installation of controls to a planned maintenance turnaround in Spring 2019." PC5 at 5. The Agency noted that the existing compliance date of December 31, 2014 for certain emission units located at petroleum refineries (Section 217.Appendix H units) was established in the underlying rulemaking on the basis of negotiations between the Agency and the affected entities. PC5 at 5-6, citing Tr. 2 at 21.

The Agency stated that the CAA "sets forth the timeframes governing the steps required following the promulgation of a new or revised NAAQS." PC5 at 6, citing 42 USC § 7407. The Agency contended that, assuming the USEPA promulgates the ozone standard by July 29, 2011, "based upon the statutory time frames for states to submit recommended designations, for the USEPA to finalize designations, for submittal of the NO_x RACT SIP, and for implementation of NO_x RACT at sources, the result does not yield a compliance date of Spring 2019." PC5 at 6.

The Agency stated that, "[while] the [Agency] acknowledges that there is some uncertainty regarding the reconsideration of the ozone standard, a Spring 2019 implementation date for NO_x RACT is unsupportable at this time." PC5 at 6. The Agency explained that the USEPA's promulgation of a final standard in July, 2011, will mandate states to submit initial designations to the USEPA by a date no later than one year after promulgation of the standard, *i.e.* July 2012. *Id.*, citing 42 USC § 7407(d)(1)(A). The USEPA must then promulgate the designations of all areas no later than two years from the date of promulgation, *i.e.* July 2013. PC5 at 6, citing 42 USC § 7407(d)(1)(B). The Agency then noted that, assuming the same time frame as with the 1997 ozone standard, NO_x RACT SIPs would be due "no later than 27 months after designation," *i.e.* October 2015. PC5 at 6, citing 40 CFR § 51.912(a)(2) (2010). The Agency stated that implementation of NO_x RACT at sources is due as expeditiously as practicable, but (assuming the same time frame as with the 1997 ozone standard), "no later than the first ozone season or portion thereof which occurs 30 months after the RACT SIP is due," *i.e.* April 2018. PC5 at 7, citing 42 USC § 7502(c)(1), 40 CFR § 51.912(a)(3) (2010).

The Agency went on to give two more implementation date scenarios. The Agency stated that, if the USEPA determines that the record before it supports a strengthened standard, the USEPA has stated an intention to promulgate final designations on an accelerated schedule to allow the designations to be effective in one year. PC5 at 7, citing 75 *Fed. Reg.* 2938 at 3036-3037 (Jan. 19, 2010). The Agency noted that, under this scenario, implementation of NO_x RACT at sources would be required in April 2017. PC5 at 7. The Agency also noted that, under a

slightly modified schedule which allows 18 months for USEPA to finalize designations, implementation of NO_x RACT at sources would be due in Spetember 2017. *Id.* The Agency stated that neither scenario supports a 2019 compliance date for implementation of NO_x RACT. *Id.*

The Agency stated that the USEPA has noted certain deficiencies as to ExxonMobil's premise regarding the current NO_x RACT rule as not being approvable as RACT. PC5 at 7, citing Letter from Cheryl Newton, Director, Air and Radiation Division, Region 5, USEPA, to Laurel Kroack, Chief, Bureau of Air, Illinois EPA, (March 9, 2011) (herein referred to as "Newton Letter") (submitted to the Board on June 3, 2011). The Agency noted that "it must be emphasized that one of the deficiencies relates to the compliance date," but that the other deficiencies relate to USEPA's Economic Incentive Program (EIP) Guidelines and "include an averaging period beyond the maximum 30-day averaging period allowed under the EIP Guidelines and the lack of a specific emissions cap or environmental write-off of 10 percent on calucated allowable emissions to generate a benefit to the environment." PC5 at 7-8.

Regarding the compliance date deficiency, the Agency relied upon a USEPA statement which stated in part that "the deadline for implementation of NO_x RACT rules is the start of the ozone season in 2009, or more specifically, May 1, 2009, well before the January 1, 2012, implementation deadline. . . . The Phase 2 ozone implementation rule makes it very clear that EPA cannot approve as NO_x RACT rules that provide for implementation after May 1, 2009." PC5 at 8, citing Newton Letter at 3. The Agency believed that a compliance date of Spring 2019 is well beyond a compliance date based upon this illustration or an earlier date based upon an expedited designations schedule. Therefore, the Agency contended that a Spring 2019 compliance date would "again jeopardize the approval of the State's NO_x RACT SIP submittal." PC5 at 8.

The Agency stated that, as testified to by Mr. Kaleel, the Agency intended for Part 217 to satisfy the NO_x RACT requirements for the revised ozone standard. PC5 at 8, citing Tr. 1 at 42, citing also Tr. 2 at 58. The Agency has requested that the USEPA consider the NO_x RACT requirements promulgated by the Board in 2009 for approval as NO_x RACT in the Illinois SIP under the revised ozone standard that the USEPA is currently considering. PC5 at 8, citing 75 Fed. Reg. 76332 (Dec. 8, 2010). The Agency "recognize[d] that a rulemaking proposal to remedy the averaging period and emissions cap deficiencies is required." PC5 at 8. However, regarding emissions limitations, the Agency believed that "ExxonMobil's questioning of the adequacy of these requirements satisfying NO_x RACT under the revised ozone standard is without merit." Id.

The Agency again noted that ExxonMobil currently seeks regulatory relief through a variance petition before the Board that would provide an extension of the compliance deadline for Appendix H units from December 31, 2014, to May 1, 2019. PC5 at 9, citing ExxonMobil Corporation v. IEPA, PCB 11-86. The Agency stated that the same relief is being advanced by ExxonMobil in this proceeding. PC5 at 9. The Agency stated that:

to the extent that there could be action by USEPA that will affect [the Agency's] recommendation in the variance proceeding, it is similarly possible that such

federal action may also provide a reason for [the Agency] to modify some of the comments made herein. *Id*.

The Agency stated that NO_x emissions reductions will improve both ozone and $PM_{2.5}$ air quality, since NO_x is a precursor to both pollutants. PC5 at 9. The Agency further stated that designation of areas as nonattainment will again trigger the CAA requirement for these areas to implement RACT for NO_x and VOM. *Id*. The Agency concluded that the reductions provided by the NO_x RACT requirements under Part 217 "will assist in meeting the new standards and are most likely sufficient in addressing any future requirements to implement NO_x RACT for the new standards." *Id*.

Comments of IERG

IERG filed its final comments on July 15, 2011. IERG encouraged the Board to finalize the proposed amendments as expeditiously as possible. PC3 at 1. IERG stated that any relief from the economic impact and potential liability stemming from the "now unnecessary Illinois NO_x RACT rules" required that the compliance dates in the rule be extended and that the extension be effective immediately. *Id*.

IERG believed the Agency to be "cognizant that future Board rulemakings will be required to satisfy any future NO_x RACT requirement that may flow from future ozone or particulate matter [NAAQS]" and intended to work with the Agency again "to ensure that those rules satisfy the federal requirements while being both economically and technologically reasonable." *Id.* at 1-2.

IERG requested that the Board grants ExxonMobil's request by extending ExxonMobil's compliance date beyond that proposed by the Agency. *Id.* at 2. Alternatively, if the Board required additional information or time to consider ExxonMobil's request, IERG suggested that the Board address ExxonMobil's request in ExxonMobil's pending variance proceeding before the Board, rather than delay this matter any further. *Id.*

Comments of ExxonMobil

The Board received the post-hearing comments of ExxonMobil on July 18, 2011. ExxonMobil noted that the Agency's proposed amendments do not include a compliance deadline for ExxonMobil's Appendix H units, but rather deleted ExxonMobil's emission units from Appendix H, subjecting them to the January 1, 2015 compliance date. PC6 at 1. ExxonMobil stated that, "[in] the simplest terms, the Rule is no longer federally required, and accordingly, compliance with the Rule at this time, and or by January 1, 2015, is unnecessary." *Id.* at 1-2. ExxonMobil requested that the Board amend the rule to replace the December 31, 2014 compliance date in Appendix H for ExxonMobil's emission units with a May 1, 2019 compliance date. *Id.* at 2.

ExxonMobil summarized its arguments into four points: (i) the NO_x RACT Rule is not federally required; (ii) the current NO_x RACT Rule is not approvable by USEPAas RACT; (iii) neither the Agency nor the regulated community know whether RACT will be required under a

future ozone standard; and (iv) the next scheduled Joliet Refinery (Refinery) turnaround beyond the current December 31, 2014 deadline is slated for Spring 2019. PC6 at 2.

ExxonMobil believed the issue to be "whether it is reasonable to mandate that ExxonMobil incur approximately \$25 million in costs to comply with a non-federally required, non-approvable Rule" and therefore "merely requests to delay its investment until its next scheduled turnaround in Spring 2019, by which time more certainty will exist as to the RACT controls required, if any, for the Appendix H emission units at the Refinery." PC6 at 2.

The NO_x RACT Rule is not Required by the CAA

ExxonMobil asserted that, in February 2011, the USEPA stated that "[a]lthough Illinois has adopted NO_x RACT rules for the ozone nonattainment areas, the 1997 8-hour standard has been attained in the two ozone nonattainment area[s] prior to the implementation of Illinois' NO_x RACT rules." PC6 at 2-3, citing 76 Fed. Reg. 9655 (Feb. 22, 2011). ExxonMobil contended that, with the approval of the NO_x RACT waiver, the USEPA "acknowledged [the Agency's] position that NO_x RACT is not required to attain the 1997 8-hour ozone standard, which was the original basis for the promulgation of the NO_x RACT Rule." PC6 at 3. ExxonMobil cited the Agency as emphasizing this point at hearing, where Mr. Kaleel, testifying on behalf of the Agency, stated that "for the time being, there is not a federal mandate for NO_x RACT." Id., citing Tr. 1 at 20. ExxonMobil also cited Mr. Kaleel as stating at hearing that the NO_x RACT Rule "is not currently required" by the CAA, that the Chicago and Metro-East areas "have attained" the 1997 ozone standard and that attainment was achieved "without full implementation" of the NO_x RACT Rule requirements. PC6 at 3, citing Tr. 1 at 21-23. ExxonMobil further cited Mr. Kaleel as stating that the USEPA's approval of a NO_x RACT waiver for the 1997 ozone standard "removed the federal obligation for NO_x RACT" and that the standard "was . . . met by the 2009 deadline for attainment of the standard." PC6 at 4, citing Tr. 1 at 21-23. ExxonMobil also cited Mr. Kaleel's testimony that, "if we had a real bad ozone season and the area has not been redesignated, . . . the waiver could be removed." *Id.*

ExxonMobil stated that, without an extension of the compliance deadline for Appendix H units, "ExxonMobil will continue to spend substantial resources, including an additional \$25 million to comply with a Rule that USEPA and [the Agency] both agree is not required to attain the 1997 8-hour ozone standard for which it was originally promulgated." PC6 at 4. ExxonMobil believed that "[it] is unreasonable to require ExxonMobil to invest approximately \$25 million at this time for compliance with a non-required rule" and that:

requiring compliance with non-federally mandated rules places Illinois companies at a disadvantage since competitors in other states, which are not mandating compliance with non-required rules, can invest resources into growing their companies rather than in projects to comply with non-required rules. *Id.*

The NO_x RACT Rule is not Approvable as RACT

ExxonMobil noted the <u>Newton Letter</u> as indicating "certain deficiencies or problems with the rules that would prevent [the USEPA] from approving these rule revisions as a revision to the

Illinois [SIP] fully meeting the CAA and EPA NO_x RACT Requirements." PC6 at 4-5, citing Newton Letter. ExxonMobil stated that Mr. Kaleel testified at hearing that the USEPA "has indicated that [the Agency] would need to revise the Part 217 regulations to be federally approvable." PC6 at 5, citing Tr. 1 at 11. ExxonMobil further stated that Mr. Kaleel testified that this rulemaking does not resolve the issues the USEPA identified in the Newton Letter and that Mr. Kaleel anticipated a future rulemaking to address the issues raised in that letter. PC6 at 5, citing Tr. 1 at 13.

ExxonMobil believed that the hearing testimony and the <u>Newton Letter</u> make it clear "that there are additional, substantive issues that will need to be addressed in a future rulemaking should RACT be required under a future ozone standard." PC6 at 5. ExxonMobil stated that, if the Agency intends to propose another rulemaking amending substantive provisions of the Rule, the scope of the compliance projects for the Refinery to meet the Rule will likely change, serving as another justification for extending the Refinery's compliance deadline to May 1, 2019. *Id*.

ExxonMobil reiterated that the USEPA's comments can impact the scope of the RACT compliance project that the Refinery has already designed and started to implement. PC6 at 5, citing Tr. 2 at 45-47. ExxonMobil noted that the USEPA, in the Newton Letter, commented that the Rule's emissions averaging provisions did not include a 10% environmental write-off and allowed for averaging over an entire ozone season rather than over a period of thirty days or less. PC6 at 5-6, citing Newton Letter at 2. ExxonMobil stated that it designed its RACT compliance project so that the emission units in its averaging plan meet the current Rule's standards as averaged over the ozone season. PC6 at 6. This difference in emission standards and averaging period would likely prompt ExoxnMobil to re-evaluate the entire scope of its project and could require that the Refinery change how it chooses to comply with the Rule. *Id.*

ExxonMobil again reiterated that, if an extension of the compliance deadline until May 1, 2019 is not obtained, ExxonMobil will be moving forward with a NO_x RACT project to comply with a Rule that is not required and that could significantly change in the near future, leading to an investment that is economically unreasonable and an inefficient use of resources. PC6 at 6. ExxonMobil noted that it will participate in any rulemaking proposed by the Agency to address the issues raised by the USEPA. *Id.*

There is Uncertainty Regarding the New Ozone Standard

ExxonMobil expected the USEPA to issue a revised 8-hour ozone standard by the end of July, 2011 and noted that the USEPA intends to issue a proposed implementation schedule for the revised standard at the same time. PC6 at 7, citing Exh. 5 at 3. ExxonMobil stated that "there is uncertainty as to what the revised ozone standard will be, whether RACT will be required for the Chicago area, and if so, what will RACT be and when will it be required to be implemented at sources." PC6 at 7, citing Exh. 5 at 5-9. ExxonMobil also cited to Mr. Kaleel's testimony that "[the Agency believed] the date that NO_x RACT would ultimately be required is uncertain right now." PC6 at 7, citing Tr. 1 at 6.

ExxonMobil stated that, as discussed at hearing and in a letter from ExxonMobil to the Agency (attached to PC6 as Exh. 2), the USEPA has indicated the NO_x RACT implementation

date to possibly be late 2017 if required by the revised standard, meaning that controls would be in place at the source prior to the 2018 ozone season. PC6 at 7, citing Tr. 1 at 32, citing also PC6 Exh. 2 at 2. ExxonMobil stated that its compliance date extension request would mean that controls would be in place prior to the 2019 ozone season, one season beyond the USEPA's schedule. PC6 at 7. ExxonMobil explained that RACT is not required for areas designated as marginal attainment and that, even as the 75 ppb ozone standard is under reconsideration, there is a likelihood of a marginal or better designation for the Chicago area. *Id.* at 7-8.

ExxonMobil believed an extension of the compliance deadline to be warranted given: (1) the proposed extension is only one ozone season beyond the USEPA's possible deadline; (2) the Rule is not required; (3) the Rule is not approvable as RACT; (4) the uncertainty as to the ozone standard, implementation schedule, and whether RACT will even be required under the revised standard; and (5) a \$25 million investment at this time is an inefficient use of resources. PC6 at 8.

The Refinery's Next Turnaround Beyond 2014 is in 2019

ExxonMobil stated that the Agency, in the initial NO_x RACT Rule proceeding, acknowledged that refineries are in a unique situation given the nature of their operations and turnaround schedules. PC6 at 8. ExxonMobil noted that Mr. Kaleel testified at hearing that Appendix H was added in an attempt to accommodate the turnaround schedules for two of the three petroleum refineries that were affected by the rulemaking. *Id.* at 8-9, citing Tr. 1 at 44-45.

ExxonMobil stated that the nature of the Refinery's operations has not changed since promulgation of the NO_x RACT Rule. PC6 at 9. ExxonMobil noted that the initial NO_x RACT proceeding included, in Appendix H, deadlines for the refineries that were up to four years beyond the general January 1, 2012 compliance date, based on the refineries' turnaround schedules. *Id.* ExxonMobil stated that it is requesting the May 1, 2019 compliance deadline in order for required controls to be installed at the Refinery during the Spring 2019 turnaround. *Id.* ExxonMobil believed its situation in this proceeding to be similar to the refineries' situations during the initial proceeding and therefore a similar extension is justified. *Id.* Exxonmobil contended that allowing required controls to be installed during the Spring 2019 turnaround "is consistent with [the Agency's] past practice of accommodating refineries' turnaround schedules, and thus, an extension of compliance deadline to May 1, 2019 is reasonable." *Id.* at 10.

ExxonMobil's Efforts to Obtain Relief

ExxonMobil noted that it has had ongoing discussions, including meetings with the Interim Director of the Agency and other Agency representatives, regarding the compliance deadline for Appendix H units. PC6 at 10. ExxonMobil stated that, as a result of these exchanges, it has pursued two other options in order to obtain relief from the Rule at this time, in addition to its participation in this rulemaking. *Id*.

ExxonMobil first stated that it submitted a construction permit application to the Agency requesting authorization to implement an alternate NO_x Control Strategy, pursuant to 35 Ill. Adm. Code § 217.125(c), "in lieu of compliance with the Rule's requirements for the Appendix

H units." PC6 at 10. ExxonMobil stated that its NO_x Control Strategy includes significant reductions resulting from the installation of a Selective Catalytic Reduction (SCR) Unit at the Refinery's Fluid Catalytic Cracking Unit/CO Boilers. *Id.* ExxonMobil noted that the NO_x reductions achieved by the SCR would be much greater than the approximate NO_x reduction achieved by compliance with the NO_x RACT Rule, but that the construction permit had not been issued at that time. *Id.* at 10-11. Therefore, ExxonMobil continued to expend resources to comply with the 2014 compliance deadline. *Id.* at 11.

ExxonMobil also stated that it filed a Petition for Variance from the Rule with the Board, requesting an extension of the compliance deadline to May 1, 2019, which will allow for the installation of controls during the next planned turnaround. PC6 at 11; See ExxonMobil Oil Corporation v. IEPA, PCB 11-86 (filed May 18, 2011 and presently due for decision Oct. 20, 2011). ExxonMobil noted that the Board has the authority to extend the compliance deadline for the Refinery's Appendix H units based on justification provided in this proceeding, regardless of the current pending Petition for Variance. *Id.* ExxonMobil stated that extending the compliance date until May 1, 2019 would provide the relief that ExxonMobil needs. *Id.*

Summary

ExxonMobil "[did] not intend to delay this rulemaking for other facilities subject to the Rule that need relief now in order to halt the expenditure of substantial resources on projects needed to comply with the Rule's 2012 deadline." PC6 at 11. ExxonMobil stated that it "would like to see this rulemaking proceed expeditiously in order to provide some certainty for itself and the regulated community regarding the applicable compliance deadline." *Id.* at 11-12. ExxonMobil concluded by summarizing its main points summarized above and requested that the Board extend the compliance date for the Refinery's Appendix H units to May 1, 2019. *Id.* at 12.

Comments of NRDC and Sierra Club

On June 6, 2011, Shannon Fisk submitted a public comment with the Board on behalf of the Natural Resource Defense Council and the Sierra Club. PC1 at 1. Ms. Fisk asked the Board to reject the Agency's proposal to delay the NO_x RACT requirement by three years. *Id.* at 1. Ms. Fisk claimed that the delay will slow the time in which all of Illinois comes into compliance with the ozone NAAQS and the delay would unnecessarily subject Illinois residents to unhealthy levels of ozone for an additional three years. *Id.*

Ms. Fisk began with a brief summary of the procedural history of this rulemaking. PC1 at 1-2. The next section of Ms. Fisk's comment characterized the proposed amendments contained in this rulemaking and included Ms. Fisk's summary of the Agency's and IERG's reasons for adopting the amendments. *Id.* at 2-3. Ms. Fisk explained that, according to 42 USC § 7501(b), states are required to submit plans for stationary sources to adopt RACT if the nonattainment designation is triggered. *Id.* at 2. Ms. Fisk also stated that "[s]ubsection (c)(1) of 42 U.S.C. 7502 provides that the State plans shall require implementation of RACT as 'expeditiously as practicable.'" *Id.* at 3. Ms. Fisk added that, on March 17, 2008, the USEPA

informed the Agency that Illinois failed to timely submit a NO_x RACT SIP as required by the CAA. *Id.*, citing 73 Fed. Reg. 15,416.

Ms. Fisk included in her comment four reasons that the Board adopted the NO_x RACT Rules:

(1) the [CAA] requirement for NO_x [RACT] requirements for major sources located in areas designated as nonattainment under the 1997 8-hour ozone NAAQS, (2) the CAA requirement for [RACM], including RACT, for areas designated as nonattainment under the 1997 PM_{2.5} NAAQS, (3) future RACT requirements for areas designated nonattainment under the 2006 PM_{2.5} NAAQS and (4) future RACT requirements for areas designated nonattainment under the 2008 ozone NAAQS. PC1 at 3, citing In the matter of: Nitrogen Oxides Emissions from Various Source Categories: Amendments to 35 Ill. Adm. Code Parts 211 and 217, R08-19, Adopted Rule, 6-7 (Aug. 29, 2009).

Ms. Fisk noted that the Agency submitted the proposed NO_x RACT rules to the USEPA for approval on September 1 and 2, 2009. PC1 at 3. Ms. Fisk stated that the USEPA waived the NO_x RACT requirements for the areas previously designated as nonattainment areas in Illinois because the areas reached attainment. *Id.*, citing 76 *Fed. Reg.* 9655 (Feb. 22, 2011). Ms. Fisk acknowledged that the USEPA has found that the Illinois areas previously designated as nonattainment for 1997 PM_{2.5} standards and the 2006 PM_{2.5} standards have reached attainment. *Id.*, citing 76 *Fed. Reg.* 12302 (Mar. 7, 2011); 74 *Fed. Reg.* 62243; and 74 *Fed. Reg.* 58688 (Nov. 13, 2009).

Ms. Fisk stated that the USEPA has delayed designating nonattainment areas under the 2008 ozone NAAQS while the USEPA reconsiders this standard. PC1 at 3. Ms. Fisk claimed that the USEPA proposed to "strengthen" the ozone standard in 2010, which will be finalized by the end of July 2011. *Id.*; 75 *Fed. Reg.* 2938 (Jan. 19, 2010).

Ms. Fisk contended that the Agency and IERG have concluded that the CAA does not currently require Illinois to implement NO_x RACT for two reasons. PC1 at 4. First, Illinois has attained the 1997 ozone standard and the 1997 and 2006 PM_{2.5} standards. *Id.* Second, the USEPA has not designated nonattainment areas under the 2008 ozone standards. *Id.* According to Ms. Fisk, the Agency expected that new nonattainment areas will be designated in 2012, which allowed for the Agency to delay the NO_x RACT requirement until the beginning of 2015. *Id.*

Ms. Fisk stated that the Agency and IERG were arguing that, since the federal law will not require Illinois to comply with NO_x RACT until 2015, the compliance date for the NO_x RACT rules should be extended until 2015 to avoid premature costs of compliance for the regulated community. PC1 at 4. Ms. Fisk further stated that IERG argued that the compliance date should be postponed because the definition of "reasonably available" may change due to technological advances by the time compliance is required under the CAA. *Id.*, citing <u>In the Matter of: Illinois Environmental Regulatory Group's Emergency Rulemaking, Nitrogen Oxide</u>

Emissions: Amendments to 35 Ill. Adm. Code Part 217, R 11-26, Motion for Emergency Rule at 2-3, 10-11 (Apr. 21, 2011).

The Stated Reasons for the Proposed Amendments are Unsubstantiated

Ms. Fisk argued that the Agency's and IERG's rationales for implementing NO_x RACT no longer apply to this rulemaking. PC1 at 4. Ms. Fisk pointed out that, when adopting the NO_x RACT rules, the Board relied on current and future CAA requirements. Ms. Fisk stated that the Board knew that, concurrent to adoption of the NO_x RACT Rules, the Agency "intended to request that [the USEPA] redesignate Chicago as attainment for the 1997 8-hour ozone NAAQS." *Id.* at 4. Ms. Fisk presumed that the Agency also knew that the 1997 NO_x RACT requirement could possibly be waived. According to Ms. Fisk, the Agency continued to support the NO_x RACT Rules because it was likely that Illinois would be subjected to more stringent requirements under future nonattainment designations. *Id.* Ms. Fisk also stated that the Agency emphasized that implementing NO_x RACT is crucial to preserve air quality in Illinois and downwind states. *Id.*

Ms. Fisk claimed that these two reasons for supporting the adoption of the NO_x RACT Rules still exist. PC1 at 4. Ms. Fisk restated that the Agency has identified that NO_x RACT is crucial for air quality. Further, Ms. Fisk stated that, although the USEPA has delayed nonattainment designations under the 2008 ozone NAAQS, the USEPA's proposals indicate its intentions to make the standard more stringent. *Id.* Ms. Fisk pointed out that the Agency has acknowledged that areas within Illinois are not attaining the 2008 ozone standard and further that controls be required by future NO_x RACT rules when new ozone and PM_{2.5} NAAQS nonattainment designations are made. *Id.*, citing In the Matter of Amendments to 35 Ill. Adm. Code 217, Nitrogen Oxides Emissions, R11-24, Kaleel Testimony to the Board, 2 (May 19, 2011).

Ms. Fisk believed that the only reason the Agency and IERG gave for delaying the compliance for the NO_x emissions limitations is that the "rules impose costs on the regulated community purportedly sooner than required under the CAA." PC1 at 5. Ms. Fisk argued that the Agency and IERG did not account for the fact that the NO_x RACT Rules should have gone into effect as of May 1, 2009. *Id.* Ms. Fisk believed that adopting the Agency's proposal to delay the January 1, 2012 compliance date would only delay already "tardy limits on NO_x emissions." *Id.* Additionally, Ms. Fisk pointed out that the Agency does not argue that the cost of compliance will decrease or that controls may not be necessary, only that the costs and controls are not necessary yet. *Id.* To the contrary, Ms. Fisk believed that the ozone NAAQS will be more stringent. *Id.*

Ms. Fisk added that the regulated community has already incurred costs for satisfying the existing 2012 compliance deadline. NRDC at 5, citing_R11-26, Motion for Emergency Rule, Attachments C and D (Apr. 21, 2011) (letters from companies indicate that planned expenditures and compliance projects increased dramatically as of April 2011, at which time the regulated community would incur construction and installation costs). Ms. Fisk stated that no one has addressed how much economic waste will occur if "the regulated community halts its compliance projects when they are halfway complete, only to revive them in three years, or of

the fairness of allowing for a three-year delay when some companies have already taken steps to comply by 2012." PC1 at 5.

Ms. Fisk claimed that, although the Agency and IERG are arguing that the January 1, 2012 compliance date imposed "not yet necessary" costs on the regulated community, the Board previously found these costs to be "technically feasible and economically reasonable." PC1 at 5, citing R 08-19, Opinion and Order of the Board at 8 (Aug. 20, 2009). Ms. Fisk identified that the Board noted in the August 20, 2009 opinion for R08-19 that the Agency and interested parties negotiated for over a year and the Agency's revisions to the rules were to "memorialize agreements" with the interested parties including revisions related to "compliance deadlines and emissions limitations." *Id.* Relying on the August 20, 2009 opinion, Ms. Fisk contended that, if the Board was correct in its August 20, 2009 finding, then costs associated with the 2012 compliance are consequently "economically reasonable." *Id.*

For the above reasons, Ms. Fisk claimed that, by delaying the compliance date, economic waste would occur as a result of abandoning already-incurred compliance costs, "improved public health and air quality" would be delayed by three years and the economic benefits that flow from improved health of the citizens of Illinois would not be realized. PC1 at 5-6.

Additionally, Ms. Fisk stated that there was no dispute whether the regulated community would need to comply with the NO_x RACT rules at some point in time. PC1 at 6. Ms. Fisk claimed that, to achieve this goal, the Agency requested the USEPA to "consider the rules for approval of NO_x RACT in the Illinois [SIP] under the ozone standard [the USEPA] is currently considering." *Id.* at 6, citing 75 *Fed. Reg.* 76332 (Dec. 8, 2010). Ms. Fisk, therefore, stated that "the costs of complying with the NO_x RACT Rules will have to be incurred sooner or later, but the benefit to air quality and to Illinois citizens will be greater if the Rules are implemented now." *Id.*

The Proposed Amendments Thwart the Purposes of the CAA and the Illinois Environmental Protection Act

Ms. Fisk stated that, according to 42 USC § 7502(b), a nonattainment designation triggers the CAA requirement for SIPs to include RACT. PC1 at 6. Ms. Fisk quoted 42 USC § 7502(b) in part, which requires the USEPA to set a schedule for states with nonattainment designations to submit SIPs and that the schedule must "at a minimum, include a date or dates, extending no later than 3 years from the date of the nonattainment designation, for the submission of a plan or plan revision . . . meeting the applicable requirements. . .." *Id.*, citing 42 USC § 7502(b). Ms. Fisk stated that the 1997 ozone nonattainment areas were designated in June 15, 2004. *Id.* Ms. Fisk explained that this meant that Illinois should have submitted NO_x RACT rules to the USEPA by June 15, 2007. *Id.* Ms. Fisk added that those NO_x RACT rules should have required compliance by May 1, 2009. Ms. Fisk stated that the Agency was now seeking to delay the NO_x RACT rules again, so compliance would not be required until five-and-half-years after the statutory requirements. *Id.*

Ms. Fisk believed that the Agency should follow the statutory language of the CAA, which requires SIPs to implement RACT "as expeditiously as practicable." PC1 at 6, citing 42

USC § 7502(c)(1). Ms. Fisk stated that, since portions of Illinois exceed the 2008 ozone NAAQS and that the USEPA would likely "make that standard even more protective of public health and air quality," the Agency's request to delay compliance with the NO_x RACT rules contradicted the CAA's "as expeditiously as practicable' requirement." *Id*.

Ms. Fisk stated that, although Illinois may have been released from the requirement to implement NO_x RACT for the 1997 ozone standard, Illinois had not been released from an obligation to comply with the 2008 ozone NAAQS. PC1 at 7. Ms. Fisk added that "States must submit 'infrastructure' SIPs establishing basic programs to implement and enforce NAAQS within three years of revision, regardless of designation." *Id.*, citing 42 USC § 7410(a)(1). Ms. Fisk pointed out that the 2008 ozone standard would require the Agency to submit a SIP by March 12, 2011. *Id.*, citing 73 *Fed. Reg.* 16436, 16503 (Mar. 27, 2008). Ms. Fisk claimed that the Agency acknowledged that "some areas of Illinois are not attaining the 2008 ozone standard, but desire[d] to postpone a technically feasible and economical plan to reach attainment." PC1 at 7.

Ms. Fisk contended that, by delaying implementation of state regulations in reliance of the USEPA's reconsideration of its air quality standards, "Illinois air quality will improve at a pace that thwarts the intent and purposes of the CAA." PC1 at 7. Ms. Fisk characterized the intent of and purpose of the CAA as follows: "[c]onsidered as a whole, the [CAA] reflects Congress's intent that air quality should be improved until safe and never allowed to retreat thereafter." *Id.*, citing South Coast Air Quality Mgmt. Dist. v. EPA, 472 F.3d 882, 900 (D.C. Cir. 2006). Ms. Fisk also added that the CAA requires the USEPA to reconsider the NAAQS every five years. PC1 at 7, citing 42 USC § 7409(d)(1)).

Ms. Fisk concluded by stating that the Agency and IERG were asking the Board to adopt a rule that contradicts the purposes of the Illinois Environmental Protection Act. PC1 at 7. Ms. Fisk stated that the purposes of the Act, according to Title II of the Act, was "to restore, maintain, and enhance the purity of the air of the State in order to protect health, welfare, property, and the quality of life and to assure that no air contaminants are discharged into the atmosphere without [the] treatment or control necessary to prevent pollution." *Id.*, citing 415 ILCS 5/8 (2010). Ms. Fisk contended that the postponing of a "technically feasible and economically reasonable compliance date" for reducing air pollutants would not "restore, maintain, or enhance" the purity of the air in the Illinois and asked the Board to not adopt the proposed amendments to the NO_x RACT rules. PC1 at 7.

Comments of Midwest Generation, LLC

On July 7, 2011, the Board received the comments of Midwest Generation, LLC (Midwest). Midwest noted that various documents in this proceeding discuss how the USEPA, pursuant to Section 182(f) of the CAA, "granted Illinois a waiver from the [CAA] requirement to require [RACT] for NO_x emissions." Comments of Midwest Generation, LLC (PC2) at 1. Midwest stated that the granting of this waiver was based on USEPA's finding that areas in Illinois attain the ozone NAAQS. *Id.*, citing Tr. at 22-24 (June 2, 2011). Midwest stated that Illinois had attained the NAAQS for PM_{2.5} and therefore the need for the NO_x reductions to be achieved through the rules no longer existed. PC2 at 1.

Midwest stated that the Agency "argue[d] that the new compliance date of January 1, 2015, [was] appropriate because it expects that USEPA will promulgate a new ozone NAAQS this summer and a new $PM_{2.5}$ NAAQS in the near future." PC2 at 1-2, citing Tr. at 26 (June 2, 2011). Midwest believed that NO_x RACT will again be required for Illinois to comply with the CAA requirements stemming from those NAAQS. PC2 at 2.

Midwest supported the Agency's proposal to extend the compliance date for three years and stated that it appreciated the Agency's initiative in requesting that the Board address the compliance date in light of the NO_x waiver. PC2 at 2.

Comments of Alton Steel, Inc.

On July 18, 2011, the Board received the public comment of Alton Steel, Inc. (ASI). ASI stated that it "wholeheartedly agree[d] with and support[ed] the [Agency's] proposal to change the compliance date from January 1, 2012 to January 1, 2015 and to expedite such rulemaking." PC4 at 2.

ASI stated that its reheat furnace is a "1967 first generation walking beam furnace with cold-air, roof-fired burners." PC4 at 2. Current NO_x emission limits for this type of furnace are "0.03 lb/mmBtu of natural gas." *Id.*, citing 35 Ill. Adm. Code Part 217.244. ASI stated that it would not be able to meet this standard with its current cold-air, roof-fired burners. PC4 at 2.

ASI stated that, if the January 1, 2012 compliance date is not extended, ASI "[would] likely file for an adjusted standard" which would result in "additional expenditures on the part of ASI, the [Agency], and the [Board]." PC4 at 3. ASI cited as reasoning for this position a determination from an engineering firm retained by ASI to review its options to meet the current NO_x standard. *Id.* at 3. This determination found that the only way ASI could meet the 0.03 lb/mmBtu standard with its currently configured roof-fired burners "[was] to add a flue gas recirculation system which dilutes the combustion air with predominantly inert gases." *Id.* ASI believed that this add-on would decrease the furnace's thermal efficiency and potentially the product quality. *Id.* ASI further believed that this system would "far exceed" the dollar amount considered RACT. *Id.*

ASI stated that it was also considering installing a new energy-efficient furnace, which would reduce fuel usage, lower NO_x emissions and reduce ASI's carbon footprint. PC4 at 3. ASI believed that this project may require a few years to complete based on time frames noted for permitting, price quoting, economic and technical feasibility review and installation. *Id.* at 3. ASI stated that this project would require it to file a motion for a variance from the January 1, 2012 compliance date. *Id.* ASI contended that, based on the time required to review this option, it may not be feasible to timely file the variance motion prior to the January 1, 2012 compliance date. *Id.*

ASI concluded by restating its support of the deadline extension and stated that such extension should be expedited "so as to avoid compliance requirements and unreasonable and unnecessary expenditures upon ASI prior to the imposition of federal requirements." PC4 at 3-4.

32

DISCUSSION ON THE RULEMAKING PROPOSAL

While most participants in this rulemaking were in favor of the Agency's proposal, as noted above, ExxonMobil expressed serious concern regarding the proposed extension of the compliance date as it related to its units listed in Section 217.Appendix H. In addition, NRDC and the Sierra Club opposed the adoption of the Agency's proposal. In this section, the Board restates the issues raised by the participants during the hearing process and repeats its findings on the technical feasibility and economic reasonableness of the proposed amendments to Part 217. Finally, the Board again provides a section-by-section breakdown of the proposed amendments.

ExxonMobil's Request for a Compliance Date of May 1, 2019

ExxonMobil sought a compliance deadline of May 1, 2019, to correspond with the turnaround schedule at its Refinery. For the reasons explained below, the Board declined to adopt a May 1, 2019 compliance deadline for ExxonMobil in this rulemaking.

ExxonMobil commented that it did not wish to delay completion of this rulemaking, noting that sources other than itself need the relief that adoption of the proposal will provide. *See, supra* at 29, quoting PC6 at 1. Accordingly, the Board did not delay completion of rulemaking in this time-sensitive docket longer than may be required by the Act or the APA. While the Board recognized ExxonMobil's position regarding the proposed compliance date, the Board was also mindful of the numerous other sources which are currently faced with a January 1, 2012 deadline and which require action on this rulemaking proposal as expeditiously as possible. The Board noted the comments of Alton Steel and Midwest Generation as examples of the predicaments currently faced by these other sources. The Board also noted that the adoption of a second notice proposal would potentially allow JCAR to rule on the proposal at its next meeting, now scheduled for Tuesday, August 16, 2011.

ExxonMobil is currently pursuing other avenues of relief, including the pending PCB 11-86 petition for variance, in which ExxonMobil seeks a May 1, 2019 compliance deadline. But, as stated by the Agency and ExxonMobil itself in this docket, "there is some uncertainty regarding the [USEPA's] reconsideration of the ozone standard." PC5 at 6, *see also* PC6 at 7¹. The Board noted that the USEPA action on reconsideration of the ozone standard expected on July 29, 2011 may provide additional information that would be helpful in making a determination concerning ExxonMobil's request. In this regard, the Agency stated that any action by the USEPA regarding the reconsideration of the ozone standard may also provide a reason for the Agency to change some of its comments regarding ExxonMobil's request. PC5 at 9.

¹ The Board took judicial notice of the hearing officer June 20, 2011 order in PCB 11-86. In that order, the hearing officer granted the joint July 15, 2011 Agency/ExxonMobil request for postponement until August 15, 2011 of the deadline date for the filing of the Agency's recommendation, and resulting cancellation of the scheduled August 4, 2011 hearing.

Unlike ExxonMobil who sought other avenues of relief, there remained a number of sources in Illinois who have relied strictly on this rulemaking proposal to bring the relief they sought from the January 1, 2012 compliance deadline. The Board did not find it economically reasonable to withhold a determination on this rulemaking proposal while further exploring ExxonMobil's position in light of anticipated USEPA action. Based on the pendency of the PCB 11-86 variance petition and the uncertainty regarding the effect of any USEPA July 2011 action, the Board did not at this time include in this opinion and order the compliance deadline extension requested for ExxonMobil's Refinery.

The Board noted that, upon Board adoption of rules in this consolidated docket and filing of the rules with the Secretary of State, ExxonMobil's Refinery would be subject to the generally applicable January 1, 2015 compliance deadline. The Act provides that the filing of a petition for adjusted standard or for variance within 20 days of the effective date stays the effective date of any rule adopted in this docket as it applies to the petitioner. *See* 415 ILCS 5/28.1(h) and 38(b)(2010). The Board did not see that any harm will come to ExxonMobil if the Board proceeded to complete rulemaking in this docket to provide relief to other affected sources; while ExxonMobil and the Agency await USEPA action that may affect ExxonMobil's situation. The Board stated that it will make a determination on the issue of appropriate relief for ExxonMobil in the context of any appropriate later regulatory or adjudicatory petition.

NRDC and Sierra Club Comments

As noted above, NRDC and Sierra Club opposed the Agency's proposal to delay the NO_x RACT requirement by three years. They generally contended that the delay will slow the time in which all of Illinois comes into compliance with the ozone NAAQS and the delay would unnecessarily subject Illinois residents to unhealthy levels of ozone for an additional three years. The Board noted that on February 22, 2011, USEPA granted Illinois a waiver from the NO_x RACT requirements based on its finding that the 1997 8-hour ozone NAAQS had been attained in the Chicago-Gary-Lake County, IL-IN and St. Louis, MO-IL areas without the implementation of NO_x RACT in the Illinois portions of these areas. Ag. Mot. Exp. Rev. at 2-3. The Board further noted that both of Illinois' nonattainment areas now attain the 1997 $PM_{2.5}$ NAAQS. *Id.* at 3.

The Board stated that the existing NO_x RACT regulations imposed compliance requirements upon the regulated community prior to when they would be necessary to meet express USEPA requirements under the CAA. This resulted from USEPA's waiver of the NO_x RACT requirement to meet the 1997 8-hour ozone standard, the reconsideration of the 2008 8-hour ozone standard and the USEPA's delay in adopting the 8-hour ozone standard revision proposed in 2010. An argument was made that delay in implementation of the NO_x RACT may slow the time in which all of Illinois complied with the ozone NAAQS. But, the Board believed that it was prudent to implement NO_x RACT rules upon the promulgation of the revised ozone standard and underlying implementation procedures. This seemed particularly appropriate due to uncertainty associated with respect to the USEPA's plans to change the primary ozone standard, and potentially the NAAQS for PM. In light of these circumstances, the Board found that the record supported the proposed compliance deadline of January 1, 2015.

Technical Feasibility and Economic Reasonableness

The Agency contended that the amendments to Part 217 are being proposed to extend the compliance date for NO_x requirements for a number of source categories and that the amendments did not impose any additional requirements upon affected sources. SR at 13. The Agency therefore believed that an analysis of technical feasibility and economic reasonableness was not appropriate. *Id.*

The Agency noted, however, that an analysis of the technical feasibility and economic reasonableness was performed in the initial rulemaking in R08-19. SR at 13. The Agency stated that, "[b]y extending the compliance date for the NO_x requirements, affected sources gain an economic benefit by delaying implementation costs and associated expenses, such as installation, monitoring, and recordkeeping and reporting costs." *Id*.

In a letter dated April 13, 2011, the Board requested that the Department of Commerce and Economic Opportunity conduct an economic impact study of the Agency's rulemaking proposal. *See* 415 ILCS 5/27(b) (2008). On May 23, 2011, the Board received a response from the DCEO. In a letter dated May 5, 2011, DCEO Director Warren Ribley stated that, "[a]t this time, the Department is unable to undertake such an economic impact study" and that therefore the DCEO "must respectfully decline [the Board's] request." At the second hearing held on June 28, 2011 in Edwardsville, the hearing officer noted the Board's request to the DCEO and the DCEO's response. Tr. at 5-6, (June 28, 2011).

The Board found that the record supported the conclusion that compliance with the proposed amendments did not impose any new technical requirements. The Board also found that the proposal was economically reasonable.

Section-by-Section Analysis of the Proposal

The proposal is broken down in the sections below.

35 Ill. Adm. Code 217

Subpart D: NOx General Requirements

Section 217.152 Compliance Date. The Agency proposed to amend this Section to provide in subsection (a) that compliance with the requirements of Subparts E, F, G, H, I and M by an owner or operator of an emission unit that was subject to any one of those subparts was required beginning January 1, 2015 (instead of 2012). The Agency also proposed to amend subsection (c) so that compliance with the requirements of Subpart E or F for emission units located at a petroleum refinery was required beginning January 1, 2015 (instead of 2012), as applicable, unless emission limits were subject to Appendix H. SR at 14. The Board agreed with this position and reflected this language in its second notice order.

<u>Section 217.154 Performance Testing.</u> The Agency proposed to amend this Section to provide in subsection (a) that performance testing of NO_x emissions for emission units constructed on or before July 1, 2014 (instead of 2011), must be conducted in accordance with

Section 217.157 (Testing and Monitoring) of Subpart D. The Agency also proposed to amend subsection (b) so that performance testing of NO_x emissions for emission units constructed or modified after July 1, 2014 (instead of 2011), should be conducted within 60 days of achieving maximum operating rate but no later than 120 days after initial startup of the emission unit, in accordance with Section 217.157 of Subpart D. SR at 14. The Board agreed with the language and reflected it in the Board's second notice order.

<u>Section 217.157 Testing and Monitoring.</u> The Agency proposed to amend this Section to provide in subsection (a)(1) that a continuous emissions monitoring system was required within 12 months after an event, or by January 1, 2015 (instead of December 31, 2012), whichever was later, wherein the owner or operator was unable to meet the requirements of the exception set forth therein. SR at 14-15.

The Agency also proposed to amend this Section in subsection (e)(1) to provide that compliance with the Continuous Emissions Monitoring System ("CEMS") or Predictive Emission Monitoring System ("PEMS") requirements was required by the applicable compliance date under Section 217.152 of Subpart D. SR at 15.

The Board concurred with the Agency's proposals and reflected the language in its second notice order.

<u>Section 217.158 Emissions Averaging Plans.</u> The Agency proposed to amend this Section to provide in subsection (b) that an owner or operator should submit an emissions averaging plan to the Agency by January 1, 2015 (instead of 2012). SR at 15. The Board agreed with this provision and reflected it in the Board's second notice order.

Subpart E: Industrial Boilers

<u>Section 217.164 Emissions Limitations.</u> The Agency proposed to amend this Section to provide in subsection (a) that, on and after January 1, 2015 (instead of 2012), no person should cause or allow emissions of NO_x into the atmosphere from any industrial boiler to exceed the limitations set forth under this Section. SR at 15. The Board concurred and reflected the language in the Board's second notice order.

Subpart F: Process Heaters

<u>Section 217.184 Emissions Limitations.</u> The Agency proposed to amend this Section to provide that, on and after January 1, 2015 (instead of 2012), no person should cause or allow emissions of nitrogen oxides into the atmosphere from any process heater to exceed the limitations set forth under this Section. SR at 15. The Board agreed and reflected the language in its second notice order.

Subpart G: Glass Melting Furnaces

<u>Section 217.204 Emissions Limitations.</u> The Agency proposed to amend this Section to provide in subsection (a) that, on and after January 1, 2015 (instead of 2012), no person should

cause or allow emissions of nitrogen oxides into the atmosphere from any glass melting furnace to exceed the limitations set forth under this Section. SR at 16. The Board agreed with the proposal and reflected the language in its second notice order.

Subpart H: Cement and Lime Kilns

<u>Section 217.224 Emissions Limitations.</u> The Agency proposed to amend this Section to provide in subsections (a) and (b) that on and after January 1, 2015 (instead of 2012), no person should cause or allow emissions of nitrogen oxides into the atmosphere from any such kiln to exceed the limitations set forth under this Section. SR at 16. The Board concurred and reflected the language in its second notice order.

Subpart I: Iron and Steel and Aluminum Manufacturing

<u>Section 217.244 Emissions Limitations.</u> The Agency proposed to amend this Section to provide in subsections (a) and (b) that on and after January 1, 2015 (instead of 2012), no person should cause or allow emissions of nitrogen oxides into the atmosphere from any such furnace to exceed the limitations set forth under this Section. SR at 16. The Board concurred with the language and reflected it in the Board's second notice order.

Subpart M: Electrical Generating Units

<u>Section 217.344 Emissions Limitations.</u> The Agency proposed to amend this Section to provide that on and after January 1, 2015 (instead of 2012), no person should cause or allow emissions of nitrogen oxides into the atmosphere from any such boiler to exceed the limitations set forth under this Section. SR at 16. The Board concurred and reflected this language in the Board's second notice order.

Section 217.APPENDIX H

The Agency proposed to amend this Appendix by deleting ExxonMobil Oil Corporation and its units and the units of ConocoPhillips Company Wood River Refinery that include compliance dates before January 1, 2015. SR at 17. The Board agreed with the proposal and reflected this language in its second notice order.

Conclusion

For the reasons outlined above, the Board on July 21, 2011, proposed for second notice review by JCAR amendments to its air pollution regulations in Part 217, Nitrogen Oxides Emissions, contained in the Board's second notice opinion and order.

ORDER

The Board grants the Agency's motion to correct the transcript of the June 28, 2011 hearing and directs the Clerk to correct the transcript as requested in the Agency's motion. Further, the Board directs the Clerk to submit the following adopted amendments to the

Secretary of State for publication in the *Illinois Register*. Proposed additions appear underlined and proposed deletions appear stricken.

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

PART 217 NITROGEN OXIDES EMISSIONS SUBPART A: GENERAL PROVISIONS

Section 217.100 217.101 217.102 217.103 217.104	Scope and Organization Measurement Methods Abbreviations and Units Definitions Incorporations by Reference SUBPART B: NEW FUEL COMBUSTION EMISSION SOURCES
	SUBPART B. NEW FUEL COMBUSTION EMISSION SOURCES
Section	
217.121	New Emission Sources (Repealed)
	SUBPART C: EXISTING FUEL COMBUSTION EMISSION UNITS
Section	
217.141	Existing Emission Units in Major Metropolitan Areas
	SUBPART D: NO _x GENERAL REQUIREMENTS
Section	
217.150	Applicability
217.152	Compliance Date
217.154	Performance Testing
217.155	Initial Compliance Certification
217.156	Recordkeeping and Reporting
217.157 217.158	Testing and Monitoring Emissions Averaging Plans
217.136	Emissions Averaging Flans
	SUBPART E: INDUSTRIAL BOILERS
Section	
217.160	Applicability
217.162	Exemptions

217.164 217.165 217.166	5 Combination of Fuels				
	SUBPART F: PROCESS HEATERS				
Section 217.180 Applicability 217.182 Exemptions 217.184 Emissions Limitations 217.185 Combination of Fuels 217.186 Methods and Procedures for Combustion Tuning					
	SUBPART G: GLASS MELTING FURNANCES				
Section 217.200 217.202 217.204	Applicability Exemptions Emissions Limitations				
	SUBPART H: CEMENT AND LIME KILNS				
Section 217.220 217.222 217.224	Applicability Exemptions Emissions Limitations				
SUBPART I: IRON AND STEEL AND ALUMINUM MANUFACTURING					
Section 217.240 217.242 217.244	Applicability Exemptions Emissions Limitations				
SUBPART K: PROCESS EMISSION SOURCES					
Section 217.301	Industrial Processes				
g .:	SUBPART M: ELECTRICAL GENERATING UNITS				
Section 217.340 217.342 217.344 217.345	Applicability Exemptions Emissions Limitations Combination of Fuels				

SUBPART O: CHEMICAL MANUFACTURE

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

217.482 Allowance Allocations to Opt-In Budget Units

SUBPART V: ELECTRIC POWER GENERATION

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

SUBPART W: NO_x TRADING PROGRAM FOR ELECTRICAL GENERATING UNITS

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

SUBPART X: VOLUNTARY NO_x EMISSIONS REDUCTION PROGRAM

Section	
217.800	Purpose
217.805	Emission Unit Eligibility
217.810	Participation Requirements
217.815	NO _x Emission Reductions and the Subpart X NO _x Trading Budget
217.820	Baseline Emissions Determination
217.825	Calculation of Creditable NO _x Emission Reductions
217.830	Limitations on NO _x Emission Reductions

MO Emission Dadwation Duamosal

217.835 NO _x Er		NO_{x} E	Emission Reduction Proposal
	217.840 Agency Act		ey Action
	217.845	Emiss	ions Determination Methods
	217.850	Emiss	ions Monitoring
	217.855	Repor	ting
	217.860	Recor	dkeeping
	217.865	Enfor	cement
	217.APPEND	IX A	Rule into Section Table
	217.APPEND	IX B	Section into Rule Table
	217.APPEND	IX C	Compliance Dates
	217.APPEND	IX D	Non-Electrical Generating Units
	217.APPEND	IX E	Large Non-Electrical Generating Units
	217.APPEND	IX F	Allowances for Electrical Generating Units
	217.APPEND	IX G	Existing Reciprocating Internal Combustion Engines Affected by the NO _x
			SIP Call
	217.APPEND	IX H	Compliance Dates for Certain Emissions Units at Petroleum Refineries

AUTHORITY: Implementing Sections 9.9 and 10 and authorized by Sections 27 and 28.5 of the Environmental Protection Act [415 ILCS 5/9.9, 10, 27 and 28.5 (2004)].

SOURCE: Adopted as Chapter 2: Air Pollution, Rule 207: Nitrogen Oxides Emissions, R71-23, 4 PCB 191, April 13, 1972, filed and effective April 14, 1972; amended at 2 Ill. Reg. 17, p. 101, effective April 13, 1978; codified at 7 Ill. Reg. 13609; amended in R01-9 at 25 Ill. Reg. 128, effective December 26, 2000; amended in R01-11 at 25 Ill. Reg. 4597, effective March 15, 2001; amended in R01-16 and R01-17 at 25 Ill. Reg. 5914, effective April 17, 2001; amended in R07-18 at 31 Ill. Reg. 14271, effective September 25, 2007; amended in R07-19 at 33 Ill. Reg. 11999, effective August 6, 2009; amended in R08-19 at 33 Ill. Reg. 13345, effective August 31, 2009; amended in R09-20 at 33 Ill. Reg. 15754, effective November 2, 2009; amended in R11-17 at 35 Ill. Reg. ______, effective ______; amended in R11-24at 35 Ill. Reg. ______, effective

SUBPART D; NO_x GENERAL REQUIREMENTS

Section 217.152 Compliance Date

217 025

- a) Compliance with the requirements of Subparts E, F, G, H, I and M by an owner or operator of an emission unit that is subject to any of those Subparts is required beginning January 1, 20152012.
- b) Notwithstanding subsection (a) of this Section, compliance with the requirements of Subpart G of this Part by an owner or operator of an emission unit subject to Subpart G of this Part shall be extended until December 31, 2014, if such units are required to meet emissions limitations for NO_x, as measured using a continuous emissions monitoring system, and included within a legally enforceable order on or before December 31, 2009, whereby such emissions limitations are less than 30 percent of the emissions limitations set forth under Section 217.204.

c) Notwithstanding subsection (a) of this Section, the owner or operator of emission units subject to Subpart E or F of this Part and located at a petroleum refinery must comply with the requirements of this Subpart and Subpart E or F of this Part, as applicable, for those emission units beginning January 1, 20152012, 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 and Subpart E or F 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 E or F 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 E or F of this Part, as applicable, by the dates set forth in Appendix H.

(Source:	Amended at 35	Ill. Reg.	, effective

Section 217.154 Performance Testing

- a) Performance testing of NO_x emissions for emission units constructed on or before July 1, 20142011, and subject to emissions limitations under Subpart E, F, G, H, or I of this Part must be conducted in accordance with Section 217.157 of this Subpart. Except as provided for under Section 217.157(a)(4) and (e)(1). This subsection does not apply to owners and operators of emission units demonstrating compliance through a continuous emissions monitoring system.
- b) Performance testing of NO_x emissions for emission units for which construction or modification occurs after July 1, 20142011, and that are subject to emissions limitations under Subpart E, F, G, H, or I of this Part must be conducted within 60 days after achieving maximum operating rate but no later than 180 days after initial startup of the new or modified emission unit, in accordance with Section 217.157 of this Subpart. Except as provided for under Section 217.157(a)(4) and (e)(1), this subsection does not apply to owners and operators of emission units demonstrating compliance through a continuous emissions monitoring system, predictive emission monitoring system, or combustion tuning.
- c) Notification of the initial startup of an emission unit subject to subsection (b) of this Section must be provided to the Agency no later than 30 days after initial startup.
- d) The owner or operator of an emission unit subject to subsection (a) or (b) of this Section must notify the Agency of the scheduled date for the performance testing in writing at least 30 days before such date and five days before such date.

e) If demonstrating compliance through an emissions averaging plan, at least 30 days before changing the method of compliance, the owner or operator of an emission unit must submit a written notification to the Agency describing the new method of compliance, the reason for the change in the method of compliance, and the scheduled date for performance testing, if required. Upon changing the method of compliance, the owner or operator of an emission unit must submit to the Agency a revised compliance certification that meets the requirements of Section 217.155.

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

Section 217.157 Testing and Monitoring

- a) Industrial Boilers and Process Heaters
 - The owner or operator of an industrial boiler subject to Subpart E of this 1) Part with a rated heat input capacity greater than 250 mmBtu/hr must install, calibrate, maintain, and operate a continuous emissions monitoring system on the emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR 75, as incorporated by reference in Section 217.104. However, the owner or operator of an industrial boiler subject to Subpart E of this Part with a rated heat input capacity greater than 250 mmBtu/hr that combusts blast furnace gas with up to 10% natural gas on an annual basis and located at a source that manufactures iron and steel is not required to install, calibrate, maintain, and operate a continuous emissions monitoring system on that industrial boiler, provided the heat input from natural gas does not exceed 10% on an annual basis and the owner or operator complies with the performance test requirements under this Section and demonstrates, during each performance test, that NO_x emissions from the industrial boiler are less than 70% of the applicable emissions limitation under Section 217.164. In the event the owner or operator is unable to meet the requirements of this exception, a continuous emissions monitoring system is required within 12 months after that event, or by January 1, 2015December 31, 2012, whichever is later.
 - 2) The owner or operator of an industrial boiler subject to Subpart E of this Part with a rated heat input capacity greater than 100 mmBtu/hr but less than or equal to 250 mmBtu/hr must install, calibrate, maintain, and operate a continuous emissions monitoring system on such emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR 60, subpart A and appendix B, Performance Specifications 2 and 3, and appendix F, Quality Assurance Procedures, as incorporated by reference in Section 217.104.

- 3) The owner or operator of a process heater subject to Subpart F of this Part with a rated heat input capacity greater than 100 mmBtu/hr must install, calibrate, maintain, and operate a continuous emissions monitoring system on the emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR 60, subpart A and appendix B, Performance Specifications 2 and 3, and appendix F, Quality Assurance Procedures, as incorporated by reference in Section 217.104.
- 4) If demonstrating compliance through an emissions averaging plan, the owner or operator of an industrial boiler subject to Subpart E of this Part, or a process heater subject to Subpart F of this Part, with a rated heat input capacity less than or equal to 100 mmBtu/hr and not demonstrating compliance through a continuous emissions monitoring system must have an initial performance test conducted pursuant to subsection (a)(4)(B) of this Section and Section 217.154.
 - A) An owner or operator of an industrial boiler or process heater must have subsequent performance tests conducted pursuant to subsection (a)(4)(B) of this Section at least once every five years. When, in the opinion of the Agency or USEPA, it is necessary to conduct testing to demonstrate compliance with Section 217.164 or 217.184, as applicable, the owner or operator of an industrial boiler or process heater must, at his or her own expense, have such test conducted in accordance with the applicable test methods and procedures specified in this Section within 90 days after receipt of a notice to test from the Agency or USEPA.
 - B) The owner or operator of an industrial boiler or process heater must have a performance test conducted using 40 CFR 60, subpart A and appendix A, Method 1, 2, 3, 4, 7E, or 19, as incorporated by reference in Section 217.104, or other alternative USEPA methods approved by the Agency. Each performance test must consist of three separate runs, each lasting a minimum of 60 minutes. NO_x emissions must be measured while the industrial boiler is operating at maximum operating capacity or while the process heater is operating at normal maximum load. If the industrial boiler or process heater has combusted more than one type of fuel in the prior year, a separate performance test is required for each fuel. If a combination of fuels is typically used, a performance test may be conducted, with Agency approval, on such combination of fuels typically used. Except as provided under subsection (e) of this Section, this subsection (a)(4)(B) does not apply if such owner or operator is demonstrating compliance with an emissions limitation through a continuous emissions monitoring system under subsection (a)(1), (a)(2), (a)(3), or (a)(5) of this Section.

- Instead of complying with the requirements of subsection (a)(4) of this Section, an owner or operator of an industrial boiler subject to Subpart E of this Part, or a process heater subject to Subpart F of this Part, with a rated heat input capacity less than or equal to 100 mmBtu/hr may install and operate a continuous emissions monitoring system on such emission unit in accordance with the applicable requirements of 40 CFR 60, subpart A and appendix B, Performance Specifications 2 and 3, and appendix F, Quality Assurance Procedures, as incorporated by reference in Section 217.104. The continuous emissions monitoring system must be used to demonstrate compliance with the applicable emissions limitation or emissions averaging plan on an ozone season and annual basis.
- Notwithstanding subsection (a)(2) of this Section, the owner or operator of an auxiliary boiler subject to Subpart E of this Part with a rated heat input capacity less than or equal to 250 mmBtu/hr and a capacity factor of less than or equal to 20% is not required to install, calibrate, maintain, and operate a continuous emissions monitoring system on such boiler for the measurement of NO_x emissions discharged into the atmosphere, but must comply with the performance test requirements under subsection (a)(4) of this Section.
- b) Glass Melting Furnaces; Cement Kilns; Lime Kilns; Iron and Steel Reheat, Annealing, and Galvanizing Furnaces; and Aluminum Reverberatory and Crucible Furnaces
 - An owner or operator of a glass melting furnace subject to Subpart G of this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart I of this Part, or aluminum reverberatory or crucible furnace subject to Subpart I of this Part that has the potential to emit NO_x in an amount equal to or greater than one ton per day must install, calibrate, maintain, and operate a continuous emissions monitoring system on such emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR 60, subpart A and appendix B, Performance Specifications 2 and 3, and appendix F, Quality Assurance Procedures, as incorporated by reference in Section 217.104.
 - An owner or operator of a glass melting furnace subject to Subpart G of this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart I of this Part, or aluminum reverberatory or crucible furnace subject to Subpart I of this Part that has the potential to emit NO_x in an amount less than one ton per day must have an initial performance test conducted pursuant to subsection (b)(4) of this Section and Section 217.154.

- An owner or operator of a glass melting furnace subject to Subpart G of this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart I of this Part, or aluminum reverberatory or crucible furnace subject to Subpart I of this Part that has the potential to emit NO_x in an amount less than one ton per day must have subsequent performance tests conducted pursuant to subsection (b)(4) of this Section as follows:
 - A) For all glass melting furnaces subject to Subpart G of this Part, cement kilns or lime kilns subject to Subpart H of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart I of this Part, or aluminum reverberatory or crucible furnaces subject to Subpart I of this Part, including all such units included in an emissions averaging plan, at least once every five years; and
 - B) When, in the opinion of the Agency or USEPA, it is necessary to conduct testing to demonstrate compliance with Section 217.204, 217.224, or 217.244 of this Part, as applicable, the owner or operator of a glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, or aluminum reverberatory or crucible furnace must, at his or her own expense, have such test conducted in accordance with the applicable test methods and procedures specified in this Section within 90 days after receipt of a notice to test from the Agency or USEPA.
- The owner or operator of a glass melting furnace, cement kiln, or lime kiln 4) must have a performance test conducted using 40 CFR 60, subpart A and appendix A, Methods 1, 2, 3, 4, and 7E, as incorporated by reference in Section 217.104 of this Part, or other alternative USEPA methods approved by the Agency. The owner or operator of an iron and steel reheat, annealing, or galvanizing furnace, or aluminum reverberatory or crucible furnace must have a performance test conducted using 40 CFR 60, subpart A and appendix A, Method 1, 2, 3, 4, 7E, or 19, as incorporated by reference in Section 217.104 of this Part, or other alternative USEPA methods approved by the Agency. Each performance test must consist of three separate runs, each lasting a minimum of 60 minutes. NO_x emissions must be measured while the glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, or aluminum reverberatory or crucible furnace is operating at maximum operating capacity. If the glass melting furnace, cement kiln, lime kiln, iron and steel reheat, annealing, or galvanizing furnace, or aluminum reverberatory or crucible furnace has combusted more than one type of fuel in the prior year, a separate performance test is required for each fuel. Except as provided under subsection (e) of this Section, this subsection (b)(4) does not apply if such owner or operator is

- demonstrating compliance with an emissions limitation through a continuous emissions monitoring system under subsection (b)(1) or (b)(5) of this Section.
- Instead of complying with the requirements of subsections (b)(2), (b)(3), and (b)(4) of this Section, an owner or operator of a glass melting furnace subject to Subpart G of this Part, cement kiln or lime kiln subject to Subpart H of this Part, iron and steel reheat, annealing, or galvanizing furnace subject to Subpart I of this Part, or aluminum reverberatory or crucible furnace subject to Subpart I of this Part that has the potential to emit NO_x in an amount less than one ton per day may install and operate a continuous emissions monitoring system on such emission unit in accordance with the applicable requirements of 40 CFR 60, subpart A and appendix B, Performance Specifications 2 and 3, and appendix F, Quality Assurance Procedures, as incorporated by reference in Section 217.104 of this Part. The continuous emissions monitoring system must be used to demonstrate compliance with the applicable emissions limitation or emissions averaging plan on an ozone season and annual basis.
- c) Fossil Fuel-Fired Stationary Boilers. The owner or operator of a fossil fuel-fired stationary boiler subject to Subpart M of this Part must install, calibrate, maintain, and operate a continuous emissions monitoring system on such emission unit for the measurement of NO_x emissions discharged into the atmosphere in accordance with 40 CFR 96, subpart H.
- d) Common Stacks. If two or more emission units subject to Subpart E, F, G, H, I, M, or Q of this Part are served by a common stack and the owner or operator of such emission units is operating a continuous emissions monitoring system, the owner or operator may, with written approval from the Agency, utilize a single continuous emissions monitoring system for the combination of emission units subject to Subpart E, F, G, H, I, M, or Q of this Part that share the common stack, provided such emission units are subject to an emissions averaging plan under this Part.
- 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 applicable compliance date under Section 217.152 of this Subpart. 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, 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.
- 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 other 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 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.

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

Section 217.158 Emissions Averaging Plans

- a) Notwithstanding any other emissions averaging plan provisions under this Part, an owner or operator of a source with certain emission units subject to Subpart E, F, G, H, I, or M of this Part, or subject to Subpart Q of this Part that are located in either one of the areas set forth under Section 217.150(a)(1)(A)(i) or (ii), may demonstrate compliance with the applicable Subpart through an emissions averaging plan. An emissions averaging plan can only address emission units that are located at one source and each unit may only be covered by one emissions averaging plan. Such emission units at the source are affected units and are subject to the requirements of this Section.
 - 1) The following units may be included in an emissions averaging plan:

- A) Units that commenced operation on or before January 1, 2002.
- B) Units that the owner or operator may claim as exempt pursuant to Section 217.162, 217.182, 217.202, 217.222, 217.242, or 217.342 of this Part, as applicable, but does not claim exempt. For as long as such a unit is included in an emissions averaging plan, it will be treated as an affected unit and subject to the applicable emissions limitations, and testing, monitoring, recordkeeping and reporting requirements.
- 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.
- 2) The following types of units may not be included in an emissions averaging plan:
 - A) Units that commence operation after January 1, 2002, except as provided by subsection (a)(1)(C) of this Section.
 - B) Units that the owner or operator is claiming are exempt pursuant to Section 217.162, 217.182, 217.202, 217.222, 217.242, or 217.342 of this Part, as applicable.
 - C) Units that are required to meet emission limits or control requirements for NO_x as provided for in an enforceable order, unless the order allows for emissions averaging. In the case of petroleum refineries, this subsection (a)(2)(C) does not prohibit including industrial boilers or process heaters, or both, in an emissions averaging plan when an enforceable order does not prohibit the reductions made under the 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.
- b) An owner or operator must submit an emissions averaging plan to the Agency by January 1, <u>2015</u>2012. The plan must include, but is not limited to, the following:

- 1) The list of affected units included in the plan by unit identification number; and
- 2) A sample calculation demonstrating compliance using the methodology provided in subsection (f) of this Section for the ozone season (May 1 through September 30) and calendar year (January 1 through December 31).
- c) An owner or operator may amend an emissions averaging plan only once per calendar year. Such an amended plan must be submitted to the Agency by January 1 of the applicable calendar year. If an amended plan is not received by the Agency by January 1 of the applicable calendar year, the previous year's plan will be the applicable emissions averaging plan.
- d) Notwithstanding subsection (c) of this Section:
 - 1) If a unit that is listed in an emissions averaging plan is taken out of service, the owner or operator must submit to the Agency, within 30 days after such occurrence, an updated emissions averaging plan; or
 - 2) If a unit that was exempt from the requirements of Subpart E, F, G, H, I, or M of this Part pursuant to Section 217.162, 217.182, 217.202, 217.222, 217.242, or 217.342 of this Part, as applicable, no longer qualifies for an exemption, the owner or operator may amend its existing averaging plan to include such unit within 30 days after the unit no longer qualifies for the exemption.
- e) An owner or operator must:
 - Demonstrate compliance for the ozone season (May 1 through September 30) and the calendar year (January 1 through December 31) by using the methodology and the units listed in the most recent emissions averaging plan submitted to the Agency pursuant to subsection (b) of this Section, the monitoring data or test data determined pursuant to Section 217.157, and the actual hours of operation for the applicable averaging plan period; and
 - 2) Submit to the Agency, by March 1 following each calendar year, a compliance report containing the information required by Section 217.156(i).
- f) The total mass of actual NO_x emissions from the units listed in the emissions averaging plan must be equal to or less than the total mass of allowable NO_x emissions for those units for both the ozone season and calendar year. The following equation must be used to determine compliance:

$$N_{act} \leq N_{all}$$

Where:

$$N_{act} = \sum_{i=l}^{n} \sum_{j=l}^{k} EM_{act(i,j)}$$

$$N_{all} = \sum_{i=l}^{n} \sum_{j=l}^{k} EM_{all(i,j)}$$

 N_{act} = Total sum of the actual NO_x mass emissions from units included in the averaging plan for each fuel used (tons per ozone season and year).

 N_{all} = Total sum of the allowable NO_x mass emissions from units included in the averaging plan for each fuel used (tons per ozone season and year).

 $EM_{act(i)}$ = Total mass of actual NO_x emissions in tons for a unit as determined in subsection (f)(1) of this Section.

i = Subscript denoting an individual unit.

j = Subscript denoting the fuel type used.

k = Number of different fuel types.

n = Number of different units in the averaging plan.

 $EM_{all(i)}$ = Total mass of allowable NO_x emissions in tons for a unit as determined in subsection (f)(2) of this Section.

For each unit in the averaging plan, and each fuel used by such unit, determine actual and allowable NO_x emissions using the following equations:

1) Actual emissions must be determined as follows:

When emission limits are prescribed in lb/mmBtu,

$$EM_{act(i)} = E_{act(i)} \times H_i / 2000$$

When emission limits are prescribed in lb/ton of processed product,

$$EM_{act(i)} = E_{act(i)} \times P_i / 2000$$

2) Allowable emissions must be determined as follows:

When emission limits are prescribed in lb/mmBtu,

$$EM_{all(i)} = E_{all(i)} \times H_i / 2000$$

When emission limits are prescribed in lb/ton of processed product,

$$EM_{all(i)} = E_{all(i)} \times P_i / 2000$$

Where:

 $EM_{act(i)}$ = Total mass of actual NO_x emissions in tons for a unit.

 $EM_{all(i)}$ = Total mass of allowable NO_x emissions in tons for a unit.

 E_{act} = Actual NO_x emission rate (lbs/mmBtu or lbs/ton of product) as determined by a performance test, a continuous emissions monitoring system, or an alternative method approved by the Agency.

= Allowable NO_x emission rate (lbs/mmBtu or lbs/ton of E_{all} product) as provided in Section 217.164, 217.184, 217.204, 217.224, 217.244, or 217.344, as applicable. For an affected industrial boiler subject to Subpart E of this Part, or process heater subject to Subpart F of this Part, with a rated heat input capacity less than or equal to 100 mmBtu/hr demonstrating compliance through an emissions averaging plan, the allowable NO_x emission rate is to be determined from a performance test after such boiler or heater has undergone combustion tuning. For all other units in an emissions averaging plan, an uncontrolled NO_x emission rate from USEPA's AP-42, as incorporated by reference in Section 217.104, or an uncontrolled NO_x emission rate as determined by an alternative method approved by the Agency, will be used.

H = Heat input (mmBtu/ozone season or mmBtu/year) calculated from fuel flow meter and the heating value of the fuel used.

P = weight in tons of processed product.

g) An owner or operator of an emission unit subject to Subpart Q of this Part that is located in either one of the areas set forth under Section 217.150(a)(1)(A)(i) or (ii) that is complying through an emissions averaging plan under this Section must comply with the applicable provisions for determining actual and allowable emissions under Section 217.390, the testing and monitoring requirements under Section 217.394, and the recordkeeping and reporting requirements under Section 217.396.

- 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 that is 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.
- j) 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 NO_x pollution control equipment that controls one or more emission units included in the emissions averaging plan is shut down for a maintenance turnaround, provided that:
 - 1) the owner or operator notify the Agency in writing, at least 30 days in advance of the shutdown, of the NO_x pollution control equipment for the maintenance turnaround;
 - 2) the shutdown of the NO_x pollution control equipment does not exceed 45 days per ozone season or calendar year; and
 - 3) except for those emission units vented to the NO_x pollution control equipment undergoing the maintenance turnaround, NO_x pollution control equipment, if any, continues to operate on all other emission units operating during the maintenance turnaround.

(Source:	Amended at 35 Ill. Reg	, effective)
	SUBPART E:	INDUSTRIAL BOILERS

Section 217.164 Emissions Limitations

a) Except as provided for under Section 217.152, on and after January 1, $\underline{20152012}$, 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
Natural Gas or Other Gaseous Fuels	Industrial boiler greater than 100	0.08
	Industrial boiler less than or equal to 100	Combustion tuning
Distillate Fuel Oil	Industrial boiler greater than 100	0.10
	Industrial boiler less than or equal to 100	Combustion tuning
Other Liquid Fuels	Industrial boiler greater than 100	0.15
	Industrial boiler less than or equal to 100	Combustion tuning
Solid Fuel	Industrial boiler greater than 100, circulating fluidized bed combustor	0.12
	Industrial boiler greater than 250	0.18
	Industrial boiler greater than 100 but less than or equal to 250	0.25
	Industrial boiler less than or equal to 100	Combustion tuning

b) 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 =
$$\frac{\left(NO_{x_{NG}} * Btu_{NG}\right) + \left(NO_{x_{COG}} * Btu_{COG}\right) + \left(NO_{x_{BFG}} * Btu_{BFG}\right)}{Btu_{NG} + Btu_{COG} + Btu_{BFG}}$$

Where:

 $NO_{XNC} = 0.084 \text{ lb/mmBtu for natural gas}$

 Btu_{NG} = the heat inpu of natural gas in Btu over that period

 $NO_{x_{coo}} = 0.144 \text{ lb/mmBtu for coke oven gas}$

 Btu_{cog} = the heat input of coke oven gas in Btu over that period

 $NO_{X_{DEG}} = 0.0288 \text{ lb/mmBtu for blast furnace gas}$

 Btu_{BFG} = the heat input of blast furnace gas in Btu over that period

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

SUBPART F: PROCESS HEATERS

Section 217.184 Emissions Limitations

Except as provided for under Section 217.152, on or after January 1, $\underline{20152012}$, 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
Natural Gas or Other Gaseous Fuels	Process heater greater than 100	0.08
- 1000	Process heater less than or equal to 100	Combustion tuning
Residual Fuel Oil	Process heater greater than 100, natural draft	0.10

	Process heater greater than 100, mechanical draft	0.15
	Process heater less than or equal to 100	Combustion tuning
Other Liquid Fuels	Process heater greater than 100, natural draft	0.05
	Process heater greater than 100, mechanical draft	0.08
	Process heater less than or equal to 100	Combustion tuning
(Source: Amended at 35 III	. Reg, effective	_)

SUBPART G: GLASS MELTING FURNACES

Section 217.204 Emissions Limitations

a) On and after January 1, 20152012, no person shall cause or allow emissions of NO_x into the atmosphere from any glass melting furnace to exceed the following limitations. Compliance must be demonstrated with the emissions limitation on an ozone season and annual basis.

Product	Emission Unit Type	No _x Emissions Limitation (lb/ton glass produced)
Container Glass	Glass melting furnace	5.0
Flat Glass	Glass melting furnace	7.9
Other Glass	Glass melting furnace	11.0

b) The emissions during glass melting furnace startup (not to exceed 70 days) or furnace idling (operation at less than 35% of furnace capacity) shall be excluded from calculations for the purpose of demonstrating compliance with the seasonal and annual emissions limitations under this Section, provided that the owner or operator, at all times, including periods of startup and idling, to the extent practicable, maintain and operate any affected emission unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. The owner or operator of a glass melting furnace must maintain records that include the date, time, and duration of any startup or idling in the operation of the glass melting furnace.

	(S	Source:	Amended at 35	Ill. Reg.	, effective)	
--	----	---------	---------------	-----------	---------------	--

SUBPART H: CEMENT AND LIME KILNS

Section 217.224 Emissions Limitations

a) On and after January 1, $\underline{20152012}$, no person shall cause or allow emissions of NO_x into the atmosphere from any cement kiln 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/ton clinker produced)
Long dry kiln	5.1
Short dry kiln	5.1
Preheater kiln	3.8
Preheater/precalciner kiln	2.8

On and after January 1, <u>2015</u>2012, no person shall cause or allow emissions of NO_x into the atmosphere from any lime kiln 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	No _x Emissions Limitation (lb/ton lime produced)
Gas	Rotary kiln	2.2
Coal	Rotary kiln	2.5
(Source: Amended at 3	5 Ill. Reg, effective	·)

SUBPART I: IRON AND STEEL AND ALUMINUM MANUFACTURING

Section 217.244 Emissions Limitations

a) On and after January 1, <u>2015</u>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)
Reheat furnace, regenerative	0.18
Reheat furnace, recuperative, combusting natural gas	0.09
Reheat furnace, recuperative, combusting a combination of natural gas and coke oven gas	0.142
Reheat furance, cold-air	0.03
Annealing furnace, regenerative	0.38
Annealing furnace, recuperative	0.16
Annealing furance, cold-air	0.07
Galvanizing furnace, regenerative	0.46
Galvanizing furnace, recuperative	0.16
Galvanizing furnace, cold air	0.06

b) On and after January 1, 20152012, 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)
Reverberatory furnace	0.08
Crucible furnace	0.16
(Source: Amended at 35 Ill. Reg, effective _)

SUBPART M: ELECTRICAL GENERATING UNITS

Section 217.344 Emissions Limitations

On and after January 1, $\underline{20152012}$, no person shall cause or allow emissions of NO_x into the atmosphere from any fossil fuel-fired stationary 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	No _x Emissions Limitation (lb/mmBtu)
Solid	Boiler	0.12
Natural gas	Boiler	0.06
Liquid	Boiler that commenced operation before January 1, 2008	0.10
	Boiler that commenced operation on or after January 1, 2008	0.08
(Source: Amended at 3	5 III Reg effective	,

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

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)

<u>Point</u>	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-1-1 st Interreactor Heater, H-2	December 31, 2012
0009	CR-1 3 rd Interreactor Heater, H-7	December 31, 2012
0091	CR-3 Charge Heater	December 31, 2012
0092	CR-3 1 st Reheat Heater, H-5	December 31, 2012
0082	Boiler 17	December 31, 2012

0000	D '1 15	D 1 21 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, J-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

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

IT IS SO ORDERED.

I, John T. Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on August 18, 2011, by a vote of 5-0.

John T. Therriault, Assistant Clerk Illinois Pollution Control Board