BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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

NOTICE OF FILING

TO: Mr. John T. Therriault
Assistant Clerk of the Board
Illinois Pollution Control Board
100 W. Randolph Street
Suite 11-500
Chicago, Illinois 60601
(VIA ELECTRONIC MAIL)

Daniel Robertson
Hearing Officer
Illinois Pollution Control Board
James R. Thompson Center
100 West Randolph Street, Suite 11-500
Chicago, Illinois 60601
(VIA U.S. MAIL)

(SEE PERSONS ON ATTACHED SERVICE LIST)

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board PRE-FILED TESTIMONY OF ROBERT ELVERT ON BEHALF OF EXXONMOBIL OIL CORPORATION, PRE-FILED TESTIMONY OF DAN STOCKL ON BEHALF OF EXXONMOBIL OIL CORPORATION and PRE-FILED TESTIMONY OF DOUG DEASON ON BEHALF OF EXXONMOBIL OIL CORPORATION copies of which is herewith served upon you.

Respectfully submitted,

EXXONMOBIL OIL CORPORATION,
Petitioner,

Dated: June 20, 2011

By: /s/ Monica T. Rios
Monica T. Rios

Katherine D. Hodge
Monica T. Rios
HODGE DWYER & DRIVER
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CERTIFICATE OF SERVICE

I, Monica T. Rios, the undersigned, hereby certify that I have served the attached PRE-FILED TESTIMONY OF ROBERT ELVERT ON BEHALF OF EXXONMOBIL OIL CORPORATION, PRE-FILED TESTIMONY OF DAN STOCKL ON BEHALF OF EXXONMOBIL OIL CORPORATION and PRE-FILED TESTIMONY OF DOUG DEASON ON BEHALF OF EXXONMOBIL OIL CORPORATION upon:

Mr. John T. Therriault
Assistant Clerk of the Board
Illinois Pollution Control Board
100 West Randolph Street, Suite 11-500
Chicago, Illinois 60601

Kathleen C. Bassi, Esq.
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via electronic mail on June 20, 2011; and upon:

Daniel Robertson
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by depositing said documents in the United States Mail, postage prepaid, in Springfield, Illinois on June 20, 2011

/s/ Monica T. Rios
Monica T. Rios

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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PRE-FILED TESTIMONY OF ROBERT ELVERT
ON BEHALF OF EXXONMOBIL OIL CORPORATION

NOW COMES EXXONMOBIL OIL CORPORATION ("ExxonMobil"), by and through its attorneys, HODGE DWYER & DRIVER, and submits the following PRE-FILED TESTIMONY OF ROBERT ELVERT for presentation at the June 28, 2011 hearing scheduled in the above-referenced matter.

Good afternoon. My name is Bob Elvert, and I am the State Regulatory Advisor for the Midwest Region at ExxonMobil in Channahon, Illinois. I have more than nineteen years of experience working in the environmental field. My responsibilities include advocating ExxonMobil's perspective on environmental issues that may impact the procedures and/or operations of the ExxonMobil Joliet Refinery ("Refinery") and other company-owned facilities within those states of my responsibility.

The purpose of my testimony today is to provide a brief background on the Refinery and ExxonMobil's concerns with the NOx RACT Rule. My testimony will also outline ExxonMobil's discussions with Illinois EPA on these issues and briefly discuss recent NOx

reductions at the Refinery and NOx reductions expected to occur in the Chicago area over the next several years.

As discussed at hearing in this matter, the NOx RACT Rule, at this time, is not required by the Clean Air Act, and as currently adopted, it is not approvable as RACT. ExxonMobil has started to incur project costs to implement a rule that is not required and will soon begin to spend additional, significant resources to meet the December 31, 2014 compliance deadline applicable to emission units listed in Appendix H. However, such expenditures should be delayed until such time that the Illinois Environmental Protection Agency ("Illinois EPA") and the regulated community know if NOx RACT will even be required under a future ozone standard, and if so, what RACT will be, and when it will be required to be implemented at sources.

As background, the Refinery is located in Channahon Township in unincorporated Will County. The site is adjacent to Interstate 55 at the Arsenal Road exit, approximately 50 miles southwest of Chicago. The Refinery employs approximately 630 full-time employees, who operate, maintain, and manage the facility, which operates 24 hours a day. In addition to ExxonMobil's employees, an estimated 300 contractor employees work full-time at the Refinery providing primarily maintenance services. During turnarounds, when portions of the Refinery are shut down for construction or large-scale maintenance projects, approximately 2,000 contractor employees are on site.

The Refinery processes crude oil and is capable of processing approximately 248,000 barrels per day (nearly 10.4 million gallons per day). In addition, the Refinery produces liquefied petroleum gas, propylene, asphalt, sulfur, and petroleum coke.

I. COMPLIANCE DEADLINE

As explained in the Pre-filed Testimony of Doug Deason filed simultaneously with this testimony and in ExxonMobil's Petition for Variance currently pending before the Board, there is uncertainty regarding the promulgation and implementation of the future ozone standard. *See generally* Pre-Filed Testimony of Doug Deason on Behalf of ExxonMobil Oil Corporation, *In the Matter of: Nitrogen Oxides Emissions, Amendments to 35 Ill. Admin. Code 217,* R11-24 and 11-26 (cons.) (Ill.Pol.Control.Bd. June 20, 2011) ("Deason Testimony") (rulemaking hereafter cited as "R11-24") and Petition for Variance, *ExxonMobil Oil Corporation v. Illinois EPA,* PCB No. 11-86 (Ill.Pol.Control.Bd. May 18, 2011) ("Petition"), attached to Deason Testimony as Exhibit 1. Particularly, because of the uncertainty regarding the new ozone standard, neither Illinois EPA nor the regulated community can, at this time, pinpoint the date on which NOx RACT, if required, must be implemented at sources. In fact, Illinois EPA stated at hearing:

> We believe the date that NOx RACT would ultimately be required is uncertain right now. The date of implementation of NOx 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.

Hearing Transcript, R11-24 at 6-7 (Ill.Pol.Control.Bd. June 2, 2011) (hereafter cited as "Tr.").

At this time, the NOx RACT rule is neither mandated by federal law nor approvable by USEPA as RACT. Tr. at 10-11, 19-20. In the future, however, NOx RACT may be required at sources in order to meet the new ozone standard, but until that time, the compliance deadline should be extended to allow all facilities to delay implementation of RACT until such time it is required, if at all.

For ExxonMobil, costs have already been incurred to meet the requirements of the Rule, and although the January 1, 2015 proposed compliance date does provide some relief for emission units that are subject to the current January 1, 2012 deadline, it does not provide relief from the Rule's requirements for ExxonMobil's emission units that are subject to the compliance deadline in Appendix H of the Rule. Installation of controls for these units should be delayed until such a time they are required by a future ozone standard. Accordingly, ExxonMobil should not be required to spend millions of dollars now to comply with the Rule, especially considering that the Rule is not approvable by USEPA and RACT may not be required under the future standard. Thus, facilities should be allowed to postpone compliance with the Rule until a later date. In ExxonMobil's case, as explained in the Petition for Variance currently pending before the Board, ExxonMobil is requesting an extension of the compliance date consistent with its next turnaround scheduled for Spring 2019.

It is crucial that any controls, if required pursuant to the new ozone standard, be installed during a scheduled maintenance turnaround. In the R08-19 proceeding to adopt the NOx RACT Rule, Illinois EPA acknowledged the need to have the Rule's compliance date coincide with a planned turnaround. *See* Post-Hearing Comments, *In the Matter of Nitrogen Oxides Emissions from Various Source Categories, Amendments to 35 Ill. Adm. Code Parts 211 and 217,* R08-19 at 12 (Ill.Pol.Control.Bd. Mar. 23, 2009) (rulemaking hereafter cited as "R08-19"). Second Motion to Amend Rulemaking Proposal, R08-19 at 2, 5, 6-7, and 13-14 (Ill.Pol.Control.Bd. Mar. 23, 2009) (discussing the addition of Section 217.152(c) and Appendix H); Pre-filed Testimony of Robert Kaleel, R08-19 at 1 (Ill.Pol.Control.Bd. Jan. 20, 2009) (where Illinois EPA stated "recognizing the unique role of petroleum refineries in the region's economy, the Illinois EPA is recommending that the compliance date for refineries coincide with already planned

maintenance turnarounds to avoid unplanned shut-downs and potential disruptions to the region's fuel supply"). Typically, the facility completes maintenance turnarounds for the Refinery on a five- to six-year cycle. An unplanned turnaround to install controls on the facility's process heaters that are subject to the Rule could disrupt the fuel supply throughout the Midwest, potentially causing significantly higher gasoline and diesel fuel costs, as acknowledged by Illinois EPA in the NOx RACT rulemaking.

II. DISCUSSIONS WITH ILLINOIS EPA

ExxonMobil worked with Illinois EPA during the initial proceeding to adopt the NOx RACT Rule, and over the last several months, has had discussions with Illinois EPA regarding its proposed extension of the NOx RACT Rule's compliance deadline to January 1, 2015. ExxonMobil has also been an active participant in discussions with the Illinois Environmental Regulatory Group ("IERG") on NOx RACT issues and participated in IERG's December 15, 2010 conference call with Illinois EPA on these issues. As a result of that discussion with Illinois EPA, it became more apparent that ExxonMobil would need an extension from the December 31, 2014 compliance deadline in order to delay implementation of the non-federally required Rule and postpone the financial burden of complying with the Rule at this time.

In early February 2011, ExxonMobil requested a meeting with Illinois EPA to discuss its concerns regarding the NOx RACT waiver request. Subsequently, ExxonMobil met with Illinois EPA on March 7, 2011, and met again via conference call on March 10, to continue discussions on NOx RACT issues. ExxonMobil and Illinois EPA met for a second time in Springfield on April 14 to discuss concerns regarding the Rule's compliance deadline, and parties continued discussion, via conference call, on May 9 on the Rule and ExxonMobil's concerns regarding the uncertainty on the issuance and implementation of a future ozone standard.

At each of these discussions, one or all of the following Illinois EPA Bureau of Air personnel were present: Laurel Kroack, Bureau Chief; Rob Kaleel, Manager of the Air Quality Planning Section; and Gina Roccaforte, Legal Counsel. At the initial meeting on March 7, 2011, ExxonMobil presented not only its concerns regarding the negative financial impact of the non-federally required NOx RACT Rule on ExxonMobil, but also its concerns with the uncertainty of the future ozone standard and subsequent compliance timeline. In response to ExxonMobil's concerns, Illinois EPA raised the idea of evaluating and implementing alternative projects at the Refinery that would result in emission reductions comparable with those required by the NOx RACT Rule. On the follow-up March 10 conference call with Mr. Kaleel, ExxonMobil and Illinois EPA discussed the uncertainty of the upcoming USEPA ozone standard implementation, and eventually agreed to disagree on the date on which NOx RACT, if required, would be implemented at sources.

During the April 14, 2011 meeting with Illinois EPA, ExxonMobil indicated that it had evaluated possible alternative emission reduction projects at the Refinery and determined that there were no technically feasible and cost effective alternatives. ExxonMobil suggested that one option would be to pursue a construction permit to implement a NOx control strategy as allowed by Section 217.152(c) of the Rule, which would include the NOx reductions from the installation of the Selective Catalytic Reduction Unit ("SCR") at the Refinery's Fluid Catalytic Cracking Unit/CO Boilers. ExxonMobil also expressed the possibility of pursuing a variance from the NOx RACT Rule's December 31, 2014 deadline as another reasonable alternative. On the May 9 follow-up call, according to Illinois EPA, ExxonMobil's suggested option of using the NOx reductions from the SCR project as an alternate NOx control strategy may not be an option.

Because of the substantial costs of complying with the Rule, ExxonMobil has sought multiple avenues of relief. As noted above, ExxonMobil has had several discussions with Illinois EPA regarding revising the compliance date for certain units subject to the Rule. ExxonMobil has also filed a construction permit application to seek an alternative NOx compliance strategy. Finally, ExxonMobil filed a Petition for Variance from the Rule in order to postpone the compliance date with the Rule's requirements.

III. DELAY IN INFORMING THE PUBLIC

It is possible that the impact of the NOx RACT Rule on ExxonMobil could have been curbed had the regulated community known at an earlier date that Illinois EPA planned to request a NOx RACT waiver from USEPA for the 1997 8-hour ozone standard. The NOx RACT waiver request was submitted to USEPA on July 29, 2010, and USEPA proposed to approve the request on December 8, 2010, which was the first time that ExxonMobil became aware of Illinois EPA's request for a NOx RACT waiver. Upon review of the proposed approval, it became apparent that ExxonMobil would be financially impacted by the approval of the NOx RACT waiver. USEPA approved the waiver request on February 22, 2011, effectively making the Rule unnecessary since the State's non-attainment areas had achieved attainment of the 1997 8-hour ozone standard without implementation of the NOx RACT Rule. Thus, the immediate impact on ExxonMobil of the waiver approval is the expenditure of substantial resources to comply with a rule not required by the CAA.

Illinois EPA had several opportunities prior to the publication of USEPA's proposal to adopt the waiver to inform ExxonMobil and the regulated community of its intentions to request the NOx RACT waiver. The waiver request was submitted to USEPA on July 29, 2010, and as noted above, the regulated community did not become aware of this significant change in the

regulatory landscape until December 2010 when USEPA published the proposed approval of the request. Illinois EPA provided air regulatory updates at several seminars[1] from June 2010 through November 2010 and did not mention or indicate that it would request a waiver from the NOx RACT requirements from USEPA. In addition, during a meeting at the Refinery with Illinois EPA in October 2010 to discuss USEPA's previous concerns on VOM regulations, Illinois EPA did not inform ExxonMobil of the NOx RACT waiver request, although USEPA's concerns with the NOx RACT regulations were discussed.

Had Illinois EPA informed the public of its intent to request the waiver from the NOx RACT requirements, ExxonMobil and other facilities could have provided input to Illinois EPA, or would have at least known of the intention to file a waiver request and could have started planning for such an event. While the Illinois EPA was not required to notify the regulated community of its waiver request and ExxonMobil never asked to be notified of any such request, not informing the public of its submittal was a contradiction to the open dialogue ExxonMobil experienced with Illinois EPA from late 2005 to August 2009, where Illinois EPA and the regulated community worked closely together at all levels to propose and revise the NOx RACT Rule.

Knowledge of the July 29, 2010 request for waiver to the USEPA would have generated dialogue between the regulated community, including ExxonMobil, and Illinois EPA. Based on ExxonMobil's experience during the NOx RACT rulemaking, ExxonMobil would have had time to evaluate the financial impact on ExxonMobil of compliance with the non-federally required compliance deadlines in the NOx RACT Rule. Knowing up to six months earlier than when the proposed approval was published in the *Federal Register* would have impacted how ExxonMobil

[1] Illinois EPA presented air regulatory updates at the following seminars: Chemical Industries Council of Illinois (June 22, 2010), Three River Manufacturing Association (Oct. 22, 2010), Lake Michigan Air Director Consortium, (Oct. 26, 2010), and Lake Michigan Air and Waste Management Association (Nov. 4, 2010).

planned its upcoming projects and allocated its resources. Further, knowing sooner rather than later about the waiver request, would have allowed significantly more time to discuss with Illinois EPA possible options to repeal the NOx RACT Rule, delay implementation of the Rule at this time, or consider other alternatives.

IV. NOx REDUCTIONS

As discussed at hearing and in pre-filed testimony, NOx RACT requirements may not be required for the Chicago area if it is designated attainment or marginal nonattainment. Based on the NOx reductions required by refinery Consent Decrees, reductions resulting from facility shut downs or upgrades, and reductions from mobile sources and other regulatory requirements, the Chicago area could be classified marginal, and thus, RACT would not be required.

At ExxonMobil, NOx emissions have recently been significantly decreased by the installation of the SCR. As explained in ExxonMobil's Petition for Variance:

> A full year projection of NOx emissions following the installation of the SCR, based on the same operating rates as 2010, will result in approximately 160 tons/yr of emissions from the FCCU, a reduction in excess of eighty-five percent of NOx emissions from the FCCU, and an over forty percent reduction of NOx emissions from the entire Refinery. The approximate NOx emissions reductions resulting from compliance with the NOx RACT Rule is about 370 tons/yr, which is well below the approximate 1,300 ton reduction from the FCCU.

Petition at 28-29. ExxonMobil has proposed to use the 1300 tpy NOx reduction from the SCR as part of its alternate NOx control strategy, as detailed in the construction permit application submitted to Illinois EPA.

In addition, over the next several years, NOx reductions from other sources are expected to contribute to improving air quality in the Chicago area. Several coal-fired electrical generating units owned and operated by Midwest Generation, Dominion, and Dynegy are expected to shut down, resulting in significant NOx emission reductions. Further, air quality in

the Chicago area is expected to improve as a result of implementation of stringent Corporate Average Fuel Economy ("CAFE") standards for mobile sources, which mandate a significant increase in fuel economy.

The NOx reductions from the SCR in combination with the NOx reductions resulting from the facility closures and upgrades and other regulatory requirements will undoubtedly impact air quality in the Chicago area, and could result in a classification of marginal should the area be designated nonattainment under the new ozone standard.

V. CONCLUSION

ExxonMobil is spending resources now to comply with a Rule that is not required and is not sufficient to meet USEPA's RACT requirements. In order to postpone compliance with the Rule at this time and to stop the expenditure of resources on unnecessary projects, the compliance deadline for the NOx RACT rule must be extended, and for ExxonMobil, it is imperative, due to the uncertainty surrounding the issuance and implementation of a new ozone standard, that the compliance deadline for the Appendix H units be extended until the next scheduled turnaround. Otherwise, ExxonMobil will continue to spend additional resources to meet a deadline that is arbitrary, and as Illinois EPA stated at hearing is "ultimately . . . uncertain right now." Tr. at 6.

Thank you for allowing me the opportunity to present my testimony. I am happy to answer any questions.

* * *

ExxonMobil reserves the right to supplement this testimony.

Respectfully submitted,

EXXONMOBIL OIL CORPORATION,

Dated: June 20, 2011

By: /s/ Monica T. Rios
Monica T. Rios

Katherine D. Hodge
Monica T. Rios
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PRE-FILED TESTIMONY OF DAN STOCKL
ON BEHALF OF EXXONMOBIL OIL CORPORATION

NOW COMES EXXONMOBIL OIL CORPORATION ("ExxonMobil"), by and through its attorneys, HODGE DWYER & DRIVER, and submits the following PRE-FILED TESTIMONY OF DAN STOCKL for presentation at the June 28, 2011 hearing scheduled in the above-referenced matter.

Good afternoon. My name is Dan Stockl, and I have over 29 years experience working at the Joliet Refinery in various positions. I am currently the Project Development Group Leader at the Refinery. My primary role is to manage the development of the Refinery's large capital projects from initiation through funding.

I. PROJECT DEVELOPMENT

Properly developing a project to ExxonMobil standards requires a disciplined approach beginning with ensuring the objective is well understood. In the case of a regulatory project, discussions among ExxonMobil's various departments begins during the proposed rulemaking process in order to evaluate the scope of the proposed rulemaking and the magnitude of its

impact on the Refinery. During the rulemaking process, ExxonMobil is working with the state regulatory agency, in this case Illinois EPA, to help develop the rule. In addition, ExxonMobil is evaluating and planning for potential contingencies until the rulemaking is final. The official planning and development in response to the rulemaking commences at the point a new regulation is final, allowing ExxonMobil to clearly understand what the facility's compliance requirements are.

Once the project objective is well understood, the next step is to determine what the potential options are to meet the project objective. Depending on the objective, such options could include operational changes, as well as multiple alternative capital investment approaches. Each alternative must be thoroughly researched before determining which option is the most optimal. Finally, the optimal solution is engineered to a point where the scope and costs are sufficiently defined to request funding from the corporation for the project. Once funded, detailed design, permitting, and construction activities can begin. The typical timeline for a project of the size and complexity of the Refinery's 2014 NOx RACT project is 3-1/2 years, from the initiation of formal planning through startup.

II. COST OF COMPLIANCE

In order to meet the January 1, 2012 deadline in the NOx RACT Rule, ExxonMobil has already incurred approximately $2,000,000 in capital. The total cost for the 2012 compliance project is an estimated $2,400,000, which as explained in Bob Elvert's testimony, is an expense that was not necessary since the NOx RACT Rule is not federally required and is not approvable as RACT.

As discussed in the testimony filed by ExxonMobil in this proceeding and in the Petition for Variance (*see* Exhibit 1 of Doug Deason's testimony), ExxonMobil has already incurred

development costs of approximately $700,000 in expense and $500,000 in capital to comply with the Rule's 2014 deadline and will begin spending additional, significant resources during the later half of 2011 and first half of 2012. ExxonMobil currently anticipates incurring costs of approximately $2,100,000 in the second half of 2011, and $6,500,000 in the first half of 2012 towards compliance with the non-federally required Rule's December 31, 2014 deadline. Total expenditures required for compliance with the 2014 deadline are anticipated to be $25,700,000.

Since the 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, an extension of the compliance date 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.

Thank you for allowing me the opportunity to present my testimony. I am happy to answer any questions.

* * *

ExxonMobil reserves the right to supplement this testimony.

Respectfully submitted,

EXXONMOBIL OIL CORPORATION,

Dated: June 20, 2011

By: /s/ Monica T. Rios
Monica T. Rios

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PRE-FILED TESTIMONY OF DOUG DEASON
ON BEHALF OF EXXONMOBIL OIL CORPORATION

NOW COMES EXXONMOBIL OIL CORPORATION ("ExxonMobil"), by and through its attorneys, HODGE DWYER & DRIVER, and submits the following PRE-FILED TESTIMONY OF DOUG DEASON for presentation at the June 28, 2011 hearing scheduled in the above-referenced matter.

Good afternoon. My name is Doug Deason. I work for ExxonMobil as an Environmental Advisor. I worked extensively between 2000 and 2007 with the Texas Commission on Environmental Quality developing a series of Ozone National Ambient Air Quality Standard ("NAAQS") State Implementation Plan ("SIP") revisions. Since 2007, I have had the primary corporate responsibility to work with United States Environmental Protection Agency ("EPA") staff on stakeholder briefings on implementation strategy concepts that will be considered in the yet to be issued EPA Ozone NAAQS draft implementation rule. I will review and comment on draft EPA Ozone Implementation rules when they are issued, and then assist

our facilities around the U.S. as we work with State Agencies and EPA to develop the necessary designations and subsequent SIP to achieve the future ozone standard.

The purpose of my testimony today is to explain that a) the key information needed from EPA relating to the issuance and implementation schedule of a future NAAQS for ozone is uncertain; b) it is also uncertain whether Illinois will need to have a NOx RACT rule; c) if needed, it is uncertain by what dates any NOx RACT rule for the new ozone standard will need to be completed by the Illinois Environmental Protection Agency ("Illinois EPA"); and d) it is uncertain when affected sources will need to complete compliance plans to fulfill possible EPA obligations. This uncertainty may persist until the summer of 2013, at which time, it is possible that the implementation rule for the new standard will be final and designations and classifications could be issued.

The NOx RACT Rule, adopted by the Illinois Pollution Control Board ("Board") in August 2009, was "prepared to satisfy Illinois' obligation to submit a SIP to address the requirements under Sections 172 and 182 of the CAA for major stationary sources of NOx, in areas designated as nonattainment with respect to the [1997] 8-hour ozone and PM2.5 NAAQS." Statement of Reasons, *In the Matter of Nitrogen Oxides Emissions from Various Source Categories, Amendments to 35 Ill. Adm. Code Parts 211 and 217,* R08-19 at 5 (Ill.Pol.Control.Bd. May 9, 2008); *see* Petition for Variance, *ExxonMobil Oil Corporation v. Illinois EPA,* PCB No. 11-86 at 3-7 (Ill.Pol.Control.Bd. May 18, 2011) (hereafter cited as "Petition") (discussing promulgation of the 1997 ozone standard, NOx RACT rulemaking proceeding, submittal of the Rule to EPA, and the proposed and final NOx RACT waiver), attached hereto as Exhibit 1. Subsequently, Illinois EPA requested a NOx RACT waiver from EPA for the 1997 8-hour ozone standard requirements. Letter from Illinois EPA to EPA (July

29, 2010) (stating that the Chicago and Metro-East nonattainment areas have attained the 1997 8-hour ozone standard). On February 22, 2011, EPA approved Illinois' NOx RACT waiver request. 76 Fed. Reg. 9655 (Feb. 22, 2011). The waiver of the NOx RACT requirements renders the Rule unnecessary because EPA and Illinois EPA have determined that implementation of NOx RACT is not needed to attain the 1997 ozone standard. In fact, Illinois EPA testified at hearing in this matter that at this time "there is not a federal mandate for NOx RACT." Hearing Transcript, *In the Matter of: Nitrogen Oxides Emissions, Amendments to 35 Ill. Admin. Code 217,* R11-24 and 11-26 (cons.) at 19-20 (Ill.Pol.Control.Bd. June 2, 2011) (hereafter cited as "Tr."). Because the NOx RACT Rule is not federally required and there is uncertainty as to whether RACT will be required under the new ozone standard, and if it is, when it will be required at sources, the Illinois EPA proposed January 1, 2015 compliance deadline is premature. As discussed in detail below and in Exhibit 1, neither Illinois EPA nor the regulated community knows what the future ozone standard will be, whether RACT will be required, and what the implementation schedule for the new ozone standard will be.

I. OZONE STANDARD UPDATE

On June 7, 2011, EPA updated the public on its ozone standard implementation plan. *See* Air Quality Actions, Update for Subcommittee on Permits/NSR/Toxics (USEPA June 7, 2011), attached hereto as Exhibit 2. EPA stated that it 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. *Id.* at Slide 5. EPA also intends to issue designation guidance, although the update does not specify the precise timing for this guidance, and intends to propose an ozone standard implementation rule in conjunction with the issuance of the final reconsidered ozone standard at the end of July 2011. *Id.*

On Slide 4 of Exhibit 2, EPA also outlined anticipated NAAQS implementation milestones, including the tentative dates for the new ozone standard. For designations for the future ozone standard, EPA stated that they will be effective "no later than summer 2013," which illustrates the uncertainty facing Illinois EPA and the regulated community for a key timing element that determines a) if a NOx RACT rule will be needed, and b) if needed, when a NOx RACT rule will need to be implemented. *Id.* at Slide 4. EPA explained that the proposed implementation rule will include three key items 1) proposed approaches to classifying ozone nonattainment areas, 2) attainment deadlines for each classification, and 3) a SIP schedule and requirements for the primary standard nonattainment area. *Id.* at Slide 7.

As noted, EPA intends to issue a proposed implementation rule when the final ozone standard is issued in late July 2011, but it will take some time for the implementation rule to become final, since it will be subject to a public comment period and may undergo additional revision after EPA evaluates any public comments it receives. For example, the elapsed time between proposal and final issuance was almost eleven months[1] for the last ozone implementation rule completed by EPA, which was for the 1997 8-hour ozone standard. In that case, EPA issued the final implementation rule in conjunction with announcing the designations and classifications for the 1997 ozone standard.

When EPA completes the not yet final implementation rule, final designation process, and final classification of the Chicago area by using the not yet defined final classification approach coupled with current ozone air quality design values (at the future designation/classification date), then Illinois EPA and the regulated community will have a

[1] The implementation rule for the 1997 ozone standard was proposed June 2, 2003 (68 Fed. Reg. 32805), and the final rule was issued on April 30, 2004 (69 Fed. Reg. 23951). The 1997 standard designations and classifications were also issued in final form on April 30, 2004 (69 Fed. Reg. 23858).

complete view of EPA NOx RACT and other SIP requirements including attainment dates, SIP submission dates, and dates associated with EPA NOx RACT requirements, if needed. EPA NOx RACT milestones will be defined in the final ozone implementation rule; however, note that the proposed implementation rule, which EPA intends to issue later this summer, should contain a proposal for the NOx RACT milestones.[2]

II. THE TIMELINE FOR IMPLEMENTATION OF THE NEW OZONE STANDARD IS UNCERTAIN.

In response to the regulated community's concerns regarding the NOx RACT Rule, Illinois EPA has proposed in this rulemaking to extend the NOx RACT compliance deadline from January 1, 2012 to January 1, 2015. At hearing, Mr. Rob Kaleel, on behalf of Illinois EPA, clarified 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, which would mean projecting out, and this is speculation, but I think fairly sound that we would need to attain a standard by sometime in 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 by 2018.

Tr. at 26-27. Although Illinois EPA testified that the future ozone standard will need to be attained by some time in 2018, Mr. Kaleel also acknowledged that USEPA has indicated that the date of implementation for NOx RACT requirements for compliance with the future ozone standard could be the end of 2017. Tr. at 32. ExxonMobil also notes that many states implement

[2] Although EPA updated the public regarding the upcoming ozone standard in June 2011, EPA previously provided a more comprehensive list of ozone implementation rule elements in a March 2010 stakeholder presentation. Proposed Rule to Implement 2010 8-Hour Ozone NAAQS (USEPA Mar. 2010), attached hereto as Exhibit 3. As you will note, RACT is briefly mentioned on Slides 6 and 21, but EPA does not provide any detail on the timeline for implementation at sources, if required, or any detail on what RACT will be.

emission reduction programs completing in the attainment deadline year prior to the start of the ozone season with full EPA approval. *See generally* 40 C.F.R. § 51.908(d) (stating that implementation of control measures needed for attainment can be no later than the beginning of the attainment year ozone season). Thus, rather than three full years prior to any yet to be defined moderate attainment deadline, an option is a compliance deadline in the attainment year prior to the ozone season. In addition, in regards to the attainment date, the Clean Air Act provides, through the use of Section 181(a)(5), an extension of the attainment date in certain circumstances. 42 U.S.C. § 7511(a)(5).

As discussed at hearing and described in detail in the Petition for Variance, there are several possible scenarios for the issuance and implementation of the future ozone standard, which demonstrates the uncertainty surrounding the date on which NOx RACT, if required, must be implemented at sources. Due to the uncertainty, the proposed January 1, 2015 deadline is arbitrary, as shown by the possible scenarios described below, where, in some cases, the Chicago area is classified as marginal nonattainment and NOx RACT is not required.

A. Scenario 1 - 70 ppb Ozone NAAQS Example

Slide 1 of Exhibit 4 shows the 2010 year end 3-year design value of 74 ppb for the current Chicago non-attainment area. Also included on Slide 1 is the 2010 year end 3-year design value of 62 ppb in Will County, where ExxonMobil's Refinery is located.

This example is for an 8-hour ozone standard of 70 ppb and is shown in Slide 2 of Exhibit 4. This scenario shows possible area classifications and attainment deadlines if the new standard is set at 70 ppb and EPA adopts "Option 2A" of its potential classification options, as described on Slide 14 of Exhibit 3. Column 1 shows the area classification categories ranging from marginal to extreme. Column 2 contains the corresponding attainment deadline length

(from the effective designation date) for each classification ranging from 3 years for marginal to 20 years for extreme. In Column 3 of this example, the possible ozone ranges for each classification are listed, as previously provided by EPA in Exhibit 3. Column 4 shows where the Chicago 2010 year end 3-year design value of 74 ppb would be classified in this scenario. As you can see, in this scenario, the Chicago area would be classified a "marginal" nonattainment area, and NOx RACT would not be required for sources in the Chicago area since NOx RACT is not required for "marginal" nonattainment areas.

B. Scenario 2 - 65 ppb Ozone NAAQS Example

Slide 3 of Exhibit 4 provides a second potential classification scenario with two modifications to Scenario 1: 1) The new ozone standard is set at 65 ppb rather than 70 ppb, and 2) The use of a Clean Air Act provision allowing a state to request a lower classification is taken into account.

This example is for a 8-hour ozone standard of 65 ppb and is shown in Slide 3 of Exhibit 4. This scenario shows possible area classifications and attainment deadlines if the new standard is set at 65 ppb and EPA adopts "Option 2A" of its potential classification options as described on Slide 15 of Exhibit 3. As in the previous scenario, Column 1 shows the area classifications ranging from marginal to extreme. Column 2 contains the corresponding attainment deadline length (from the effective designation date) for each classification ranging from 3 years for marginal to 20 years for extreme. In Column 3 of this example, the possible ozone ranges for each classification are listed, as previously provided by EPA in Exhibit 3. Column 4 shows where the Chicago 2010 year end 3-year design value of 74 ppb would be classified, which in this scenario, depends on whether Illinois EPA requests to lower the classification using the Section 181(a)(4) process. 42 U.S.C. § 7511(a)(4). As you can see, if the

Section 181(a)(4) process is used, the Chicago area would be classified a "marginal" nonattainment area, and NOx RACT would not be required. Alternately, if Illinois does not ask for a lower classification, the Chicago area could be classified as moderate, and NOx RACT would be required.

C. Scenario 3 – Three options for a possible 70 ppb Ozone NAAQS

This example is for an 8-hour ozone standard of 70 ppb and is shown in Slide 4 of Exhibit 4. This scenario shows three possible area classification options and associated ozone concentration thresholds if the new standard is set at 70 ppb. *See also* Exhibit 3 at Slide 14. Column 1 shows the area classifications ranging from marginal to extreme. Columns 2, 3 and 4 show "Option 1," "Option 2A," and "Option 2B" ozone ranges for each classification, respectively. Columns 2, 3, and 4 also show the Chicago 2010 year end 3-year design value of 74 ppb in the appropriate classification row. In this scenario, the Chicago area in three of five instances is classified as a "marginal" nonattainment area, and NOx RACT would not be required.

D. Scenario 4 - 3 options for a possible 65 ppb Ozone NAAQS

This example is for an 8-hour ozone standard of 65 ppb and is shown in Slide 5 of Exhibit 4. This scenario shows three possible area classification options and associated ozone concentration thresholds if the new standard is set at 65 ppb. *See also* Exhibit 3 at Slide 15. Column 1 shows the area classifications ranging from marginal to extreme. Columns 2, 3 and 4 show "Option 1," "Option 2A," and "Option 2B" ozone ranges for each classification, respectively. Columns 2, 3, and 4 also show the Chicago 2010 year end 3-year design value of 74 ppb in the appropriate classification row. In this scenario, the Chicago area in three of five

instances is classified as a "marginal" nonattainment area, and NOx RACT would not be required.

III. CONCLUSION

As noted above, the NOx RACT Rule is not federally mandated at this time. As illustrated in the scenario examples, depending on uncertain EPA actions and continued improvements from local air quality from currently on-the-books emission reduction rules and commitments, the NOx RACT rule may not be required in the future for the Chicago area. It currently is not approvable as RACT, and due to the uncertainty surrounding the issuance and implementation of the future ozone standard, the proposed January 1, 2015 deadline should be revised.

Thank you for allowing me the opportunity to present my testimony. I am happy to answer any questions.

* * *

ExxonMobil reserves the right to supplement this testimony.

Respectfully submitted,

EXXONMOBIL OIL CORPORATION,

Dated: June 20, 2011

By: /s/ Monica T. Rios
Monica T. Rios

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Exhibit 1

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

EXXONMOBIL OIL CORPORATION	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB _____
	)	(Variance – Air)
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY,	)	
	)	
Respondent.	)	

PETITION FOR VARIANCE

NOW COMES ExxonMobil Oil Corporation ("ExxonMobil"), by and through its attorneys, HODGE DWYER & DRIVER, and, pursuant to Section 35(a) of the Illinois Environmental Protection Act ("Act"), 415 ILCS 5/35(a), and 35 Ill. Admin. Code § 104.100 *et seq.*, hereby petitions the Illinois Pollution Control Board ("Board") for a variance from the December 31, 2014 deadline for compliance with the applicable requirements of 35 Ill. Admin. Code Part 217, Subparts A, D, E, F, and Appendix H ("NOx RACT Rule" or "Rule") pursuant to the terms and conditions outlined in this Petition for Variance ("Petition").

ExxonMobil, as more fully discussed below, is requesting that the Board grant a four-year and four-month variance[1] from the deadline for compliance with the requirements of the NOx RACT Rule, which imposes a December 31, 2014 deadline for implementation of Reasonably Available Control Technology ("RACT") at the Joliet Refinery in order to control emissions of nitrogen oxides ("NOx") from certain units listed in Appendix H of the Rule. This variance from the applicable requirements of the

[1] While the full five-year variance from the December 31, 2014 deadline would extend the deadline to December 31, 2019, ExxonMobil is committing to comply with the applicable NOx RACT requirements of 35 Ill. Admin. Code Part 217 by May 1, 2019.

Rule is necessary because the Rule is arbitrary and imposes an unreasonable hardship on ExxonMobil since the requirements of the Rule are neither mandated by federal nor state statutes or regulations. ExxonMobil's request stems from the recent approval by the United States Environmental Protection Agency ("USEPA") of the Illinois Environmental Protection Agency's ("Illinois EPA") request that the NOx RACT requirements be waived because the Chicago area has attained the 1997 8-hour ozone standard. As discussed in detail below, a variance is justified in this instance because compliance with the Rule, which is not required, will cost substantial resources, and due to the uncertainty regarding the 2011 National Ambient Air Quality Standard ("NAAQS") for ozone ("2011 standard"), a variance is needed in order to extend ExxonMobil's obligation to go forward with projects to implement the NOx RACT Rule requirements at this time.

Accordingly, ExxonMobil is requesting, a four-year and four-month variance, or until May 1, 2019, from the applicable requirements of the NOx RACT Rule as set forth at 35 Ill. Admin. Code Part 217, Subparts A, D, E, F and Appendix H, for those emission units listed in Appendix H, which are required to comply with the Rule by December 31, 2014. A variance is justified because the Rule poses an arbitrary and unreasonable hardship on ExxonMobil. Further, the requested variance is necessary for the Appendix H units in order to allow ExxonMobil additional time to install any control equipment needed to comply with the Rule during a regularly scheduled maintenance turnaround, i.e. a planned shut down of the ExxonMobil's Joliet Refinery ("Refinery"). The next such scheduled turnaround in which NOx RACT controls for Appendix H units

could be installed is slated for Winter 2018/Spring 2019, and as Illinois EPA recognized in the rulemaking to adopt the NOx RACT Rule, an extended compliance date to coincide with planned maintenance turnarounds "mitigate[s] the potential for unplanned shutdowns which may result in gasoline shortages in Illinois." Post-Hearing Comments of the Illinois EPA, *In the Matter of: Nitrogen Oxides Emissions From Various Source Categories, Amendments to 35 Ill. Adm. Code Parts 211 and 21,* R08-19 (Ill.Pol.Control.Bd. Mar. 23, 2009) (hereafter cited as "Post-Hearing Comments") (rulemaking hereafter cited as "R08-19"). Finally, the variance will allow ExxonMobil to delay its approximately $28 million investment in control technology until a time when Illinois EPA and ExxonMobil have a better understanding of applicable and federally required NOx RACT requirements.

I. THE NOX RACT RULE IS NOT REQUIRED BY THE CLEAN AIR ACT.

A. Request for NOx RACT Waiver and Approval by USEPA

On July 18, 1997, USEPA promulgated the 1997 8-hour ozone standard ("1997 standard") replacing the 1-hour ozone standard that was in effect at the time. 62 Fed. Reg. 38856 (July 18, 1997). USEPA designated the Chicago-Gary-Lake County, IL-IN area ("Chicago area")[2] as a moderate nonattainment area under the 1997 standard on April 30, 2004. 69 Fed. Reg. 23857 (April 30, 2004). Because the Chicago area was designated as a moderate nonattainment area, Illinois was required to implement RACT requirements. On March 24, 2008, USEPA issued a finding that Illinois failed to make a

[2] The Illinois portion of the nonattainment area includes Cook, DuPage, Kane, Lake, McHenry, and Will Counties, as well as portions of Grundy and Kendall Counties.

RACT State Implementation Plan ("SIP") submittal as was required for its nonattainment areas. 73 Fed. Reg. 15416 (Mar. 24, 2008).

In response to USEPA's March 2008 finding, Illinois EPA filed a rulemaking proposal with the Board for the adoption of RACT to control NOx emissions from certain sources. Statement of Reasons, R08-19 (Ill.Pol.Control.Bd. May 9, 2008). Illinois EPA stated that "this rulemaking proposal has been prepared to satisfy Illinois' obligation to submit a SIP to address the requirements under Sections 172 and 182 of the CAA for major stationary sources of NOx, in areas designated as nonattainment with respect to the 8-hour ozone and $PM_{2.5}$ NAAQS." *Id.* at 5. During the rulemaking proceeding, Illinois EPA worked with several stakeholders, including ExxonMobil, in order to craft a rule that achieved the emission reductions necessary to demonstrate attainment, as well as provided flexibility in terms of emissions averaging and compliance deadlines for sources subject to the Rule. In ExxonMobil's case, the Rule establishes an initial compliance deadline of January 1, 2012, and a December 31, 2014 compliance deadline for certain covered process heaters at the Joliet Refinery.[3] 35 Ill. Admin. Code § 217.152(c) and App. H. The Board adopted the final NOx RACT Rule on August 20, 2009. Final Opinion and Order, R08-19 (Ill.Pol.Control.Bd. Aug. 20, 2009).

After the NOx RACT Rule was adopted, Illinois EPA submitted the Rule to USEPA as a SIP revision. In July 2010, however, Illinois EPA submitted a request to USEPA for a waiver from the NOx RACT requirements for the 1997 standard. Letter

[3] As explained in further detail below, ExxonMobil is seeking a variance for process heaters listed in Appendix H of the Rule. Other, non-Appendix H, process heaters subject to the Rule at the Refinery will comply with the applicable deadline, January 1, 2012, or if the deadline is extended, January 1, 2015.

from Illinois EPA to USEPA (July 29, 2010), attached hereto as Exhibit 1. Illinois EPA's request stated, in relevant part:

> The Illinois EPA also requests a waiver from the RACT requirement for major stationary sources of nitrogen oxides (NOx) in both the Chicago and Metro-East ozone nonattainment areas, as provided under Section 182(f) of the CAA for the 1997 8-hour ozone standards. Specifically, this request seeks to exempt major stationary sources of NOx (as defined in section 302 and Subsections 182(c), (d), and (e) of the CAA) from the RACT requirements of Section 182(b)(2). . . . As quality assured monitoring data for 2006 through 2008 (and 2007 through 2009) demonstrate that the Chicago area has attained the 1997 8-hour ozone standard, and monitoring data for 2007 through 2009 demonstrate that the St. Louis area, including the Metro-East area in Illinois has also attained the 1997 8-hour standard, additional NOx emission reductions would not contribute to attainment of the 1997 8-hour ozone NAAQS in the two Illinois nonattainment areas. Thus, these areas are therefore eligible for a waiver of the RACT requirement under Section 182(f) for the 1997 standard.

Id. at 2. Illinois EPA further stated in regards to the NOx RACT Rule:

> Although the Illinois EPA is requesting a waiver from the NOx RACT requirement for the 1997 8-hour ozone standard, Illinois has already submitted final rules to U.S. EPA that meet or exceed NOx RACT control levels for major stationary sources in both the Chicago and Metro-East ozone nonattainment areas. . . The Illinois EPA requests that U.S. EPA approve these rules as amendments to Illinois' SIP and intends that these rules will meet Illinois' NOx RACT requirements for the a revised ozone standard expected to be promulgated in August 2010.

Id. at 3. As discussed in further detail below, USEPA has expressed concern with the NOx RACT Rule and will require revisions to the Rule prior to approval as part of the SIP. Letter from Illinois EPA to Illinois Environmental Regulatory Group ("IERG") (Jan. 12, 2011), attached hereto as Exhibit 2 ("IERG Letter"). As such, Illinois EPA intends to withdraw its request for approval of the Rule as part of the SIP. Also note that the revised ozone standard referenced by Illinois EPA was not promulgated in August 2010, and the 2011 standard is not expected to be issued until July 2011. EPA's Revised

Motion Requesting a Continued Abeyance and Response to State Petitioner's Cross Motion, *Mississippi, et al. v. USEPA*, No. 08-1200 (D.C. Cir. Dec. 8, 2010) (requesting until July 29, 2011 to complete the rulemaking).

On December 8, 2010, USEPA proposed to approve Illinois EPA's NOx waiver request. 75 Fed. Reg. 76332 (Dec. 8, 2010). USEPA explained that its "guidance provides that three consecutive years of monitoring data documenting ozone levels attaining the ozone NAAQS in areas which a State has not implemented certain NOx emission controls is adequate to demonstrate that the additional NOx emission reductions will not aid in achieving attainment of the ozone NAAQS." 75 Fed. Reg. at 76335. In Illinois' case, "based on the most recent three years of quality – assured ozone monitoring data, the 1997 8-hour ozone standard has been attained in these areas." *Id.* USEPA concluded:

> EPA's review of the ozone monitoring data and Illinois' NOx emission control exemption request shows that Illinois has complied with the requirements for a NOx RACT exemption in the State's 8-hour ozone nonattainment areas under section 182(f) of the CAA consistent with the guidelines contained in EPA's January 14, 2005, guidance document. Therefore, EPA proposes to determine that the State of Illinois qualifies for exemption from NOx RACT requirements for the Illinois portions of the Chicago-Gary-Lake County, IL-IN and St. Louis, MO-IL ozone nonattainment areas for the purposes of attaining the 1997 8-hour ozone NAAQS.

Id. Despite the opportunity to inform the regulated community, including ExxonMobil, at three open industry related CAA seminars between July 29 and December 10, 2010, the Illinois EPA did not mention or discuss its plans or the July 29, 2010 NOx waiver request. By not doing so, the regulated community and ExxonMobil, which worked extensively with the Illinois EPA during the NOx RACT process, lost valuable time in

which to make a decision to continue to incur costs in order to comply with the January 1, 2012 compliance deadline. ExxonMobil was unaware of Illinois EPA's request for the NOx RACT waiver until USEPA's proposed approval of the request was published in the Federal Register.

USEPA approved Illinois' NOx RACT waiver request on February 22, 2011. 76 Fed. Reg. 9655 (Feb. 22, 2011). USEPA summarized its approval by stating that "[t]his NOx RACT waiver is based on the most recent three years of complete, quality assured ozone monitoring data, which show attainment of the 1997 8-hour ozone standard in the subject nonattainment areas and demonstrate that additional areas would not contribute to attainment of the 1997 8-hour ozone NAAQS." *Id.* USEPA, in approving the request, further explained that "[a]lthough Illinois has adopted NOx RACT rules for the ozone nonattainment areas, the 1997 8-hour ozone standard has been attained in the two ozone nonattainment area[s] prior to the implementation of Illinois' NOx RACT rules." *Id.*

B. Impact of Approval of NOx RACT Waiver

USEPA's December 2010 proposal to approve Illinois' waiver request raised concerns among the regulated community regarding the upcoming compliance deadlines in the NOx RACT Rule. From the regulated community's perspective, the waiver of the NOx RACT requirements renders the NOx RACT Rule unnecessary because USEPA and Illinois EPA have determined that implementation of NOx RACT is not needed to attain the 1997 standard. The pending compliance deadlines, including the initial January 1, 2012 deadline, means that sources subject to the Rule, such as ExxonMobil, are already spending (or have already spent) resources to install controls in order to comply with the

Rule by the deadlines. However, such use of resources and expenditures are unnecessary since the Rule is not required by the CAA, and the primary basis for its adoption is no longer valid.

In response to these concerns, on January 12, 2011, Illinois EPA sent a letter to the IERG outlining its plan for addressing NOx RACT. *See* Exhibit 2. Illinois EPA stated:

> The Illinois EPA recognizes that the waiver of the NOx RACT requirement to meet the 1997 8-hour ozone standard, the reconsideration of the 2008 8-hour ozone standard, and U.S. EPA's delay in adopting the 8-hour ozone standard revision proposed in 2010 results in a situation where the existing NOx RACT rules, absent an underlying federal requirement to adopt these rules at this time, imposes compliance requirements on the regulated community prior to when they will be necessary under the federal Clean Air Act. In light of that situation, the Illinois EPA intends to pursue the following:
>
> 1) To withdraw the pending request currently before the U.S. EPA to approve the Illinois NOx RACT rules as a SIP revision;
>
> 2) To file a rulemaking proposal with the Board as soon as practicable, to extend the compliance date of the Illinois NOx RACT rules to a date of January 1, 2015;
>
> 3) To support IERG and its members in a request for relief from the existing NOx RACT compliance obligations that may exist prior to January 1, 2015, consistent with the Agency's upcoming rulemaking to extend the compliance deadline to January 1, 2015, through emergency rulemaking or variance, and;
>
> 4) To continue to dialog with IERG, should U.S. EPA's expected promulgation of a new ozone standard in the summer of 2011 necessitate further changes to Illinois NOx RACT rules.

Id. at 2. Illinois EPA also commented in the IERG Letter on USEPA's review of the NOx RACT Rule. Illinois EPA stated that "U. S. EPA has identified deficiencies in

Illinois' NOx RACT rule, as submitted, and will not approve the rules as meeting RACT requirements until deficiencies have been corrected." *Id.* at 2. According to Illinois EPA, it intends to correct the deficiencies in a future rulemaking. *Id.*

As referenced in No. 3 of the IERG Letter quoted above, Illinois EPA stated that it will support IERG members, such as ExxonMobil, in requesting relief through emergency rulemaking or variance. Prior to filing this Petition, ExxonMobil met with Illinois EPA twice and had several conference calls to discuss the most prudent course of relief from the Rule's compliance deadlines. As a result of discussions with Illinois EPA, ExxonMobil has submitted an application for a construction permit to implement a NOx control strategy that accounts for the NOx emission reductions, as allowed pursuant to Section 217.152(c) of the Rule, resulting from the installation and operation of a Selective Catalytic Reduction Unit ("SCR") at the Refinery's Fluid Catalytic Cracking Unit ("FCCU")/CO Boilers as an alternative to complying with the requirements of Subparts E and F of the Rule. Should the construction permit be issued as requested in the application, it will authorize the use of emission reductions from the FCCU towards compliance with the Rule in lieu of reductions from the covered process heaters. In addition, ExxonMobil discussed and shared a preliminary draft of this variance petition with Illinois EPA to show Illinois EPA that a variance is necessary to alleviate the burden of complying with this Rule at this time because the Rule is arbitrary and an unreasonable hardship on ExxonMobil.

As noted above, ExxonMobil and Illinois EPA have had several discussions regarding the timeline for compliance with the Rule. Illinois EPA has recognized that the

January 1, 2012 deadline is unreasonable considering the uncertainties associated with the upcoming 2011 standard and has filed a rulemaking proposal to alleviate the burden of complying with the 2012 deadline. *In the Matter of: Amendments to 35 Ill. Adm. Code 217, Nitrogen Oxide Emissions,* R11-24 (Ill.Pol.Control.Bd. Apr. 4, 2011) ("2011 Rulemaking") (hereafter cited as "R11-24"). The 2011 Rulemaking seeks to extend the general date of compliance with the Rule from January 1, 2012 to January 1, 2015. At the time of the filing of this Petition, the Board had issued a First Notice Opinion and Order and scheduled two hearings in this matter. First Notice Opinion and Order, R11-24 (Ill.Pol.Control.Bd. Apr. 7, 2011); Hearing Notice, R11-24 (Ill.Pol.Control.Bd. Apr. 18, 2011).

Although this Petition is not intended to delay the 2011 Rulemaking, a request for variance is necessary because the 2011 Rulemaking does not provide the necessary relief for ExxonMobil. From ExxonMobil's perspective, the 2011 Rulemaking revises the compliance date to allow ExxonMobil merely one additional day to meet the deadline for the Appendix H emission units, i.e., ExxonMobil's section of Appendix H is deleted in its entirety so that the process heaters included therein would now be subject to the proposed general compliance date of January 1, 2015. Further, while ExxonMobil appreciates that Illinois EPA has proposed to extend the general compliance deadline from January 1, 2012 to January 1, 2015, there remains neither a legal basis for the NOx RACT Rule at this time nor a basis for the January 1, 2015 deadline. ExxonMobil may participate in the 2011 Rulemaking in order to provide testimony regarding the fact that the Rule is not required by the CAA, and at minimum, the deadlines for compliance should be extended

to a later date when Illinois EPA and the regulated community can surmise whether NOx RACT will even be required, and if it is, what RACT will be. As discussed in more detail below, the NOx RACT Rule is arbitrary and imposes an unreasonable hardship on ExxonMobil, and thus, the Board should grant the requested variance in order to allow ExxonMobil to delay implementation of controls to comply with the Rule until the next scheduled turnaround in Winter 2018/Spring 2019.

C. The NOx RACT rule is arbitrary.

As discussed above, Illinois EPA proposed and the Board adopted the NOx RACT Rule as part of its efforts to attain the 1997 standard. However, both USEPA and Illinois EPA have determined that the Rule is not necessary to attain the 1997 standard, and in fact, the Chicago area has attained the 1997 standard without the implementation of NOx RACT at sources, which renders the NOx RACT Rule arbitrary since there is neither a federal basis nor need, at this time, for the Rule.

ExxonMobil has already incurred substantial project costs to comply with the Rule's January 1, 2012 deadline, and although Illinois EPA filed a rulemaking proposing to extend the 2012 deadline to January 1, 2015, ExxonMobil has already taken steps to comply with the January 1, 2012 deadline. Had Illinois EPA informed the regulated community and ExxonMobil of its July 29, 2011 NOx RACT waiver request, some of these costs could have possibly been delayed. In sum, ExxonMobil has spent significant resources to comply with a Rule that is arbitrary. ExxonMobil will continue to spend additional, substantial resources in order to comply with the December 31, 2014 deadline, if this variance request is not granted. ExxonMobil should not be required to incur not

only costs, but also other resources, to comply with an arbitrary Rule. There is no support or legal authority for the NOx RACT Rule, and accordingly, a variance from the existing December 31, 2014 deadline (and/or the proposed January 1, 2015 deadline) is necessary to postpone ExxonMobil's obligation to comply with the Rule at this time.

II. USEPA'S IMPENDING PROMULGATION OF THE 2011 STANDARD RESULTS IN SERIOUS UNCERTAINTIES FOR EXXONMOBIL.

A. The 2011 Ozone Standard

USEPA is expected to issue revised ozone NAAQS in July 2011 based on its reconsideration of the 8-hour ozone standard issued in 2008. Once the 2011 standard is issued, USEPA will issue a draft ozone implementation rule incorporating from the CAA a schedule for issuing designations, submitting SIPs, implementing RACT controls, and attaining the standard. This draft implementation rule will undergo notice and comment. After reviewing and considering comments and making necessary changes to the proposal, USEPA will likely issue a final ozone implementation rule in 2012. At that point in 2012, the regulated community and state agencies will have more certainty about ozone implementation requirements including timing for non-attainment designation recommendations, USEPA designation and classification decisions, SIP revision schedules, including RACT submissions, and compliance implementation timing. However, until 2012, there is uncertainty for ExxonMobil and Illinois EPA in every step of the process of adopting and implementing the 2011 standard. The two tables below describe some, but not all, of the uncertainties associated with each step in the process of promulgating and implementing the 2011 standard, including comparing the timelines from promulgation to attainment that the 2011 standard could follow.

Table 1

Action	Uncertainties
Promulgation of the 2011 Standard	o Timing. Although USEPA has stated that the 2011 standard will be promulgated in July 2011, this is the third time USEPA has revised the date of promulgation since the initial promulgation date of August 2010. The initial revised promulgation dates were October 2010 and December 2010. It is possible that USEPA will delay the issuance of the final standard again. o Level of the ozone NAAQS. The regulated community, including ExxonMobil, and Illinois EPA do not know what the final 2011 standard will be. In January 2010, USEPA proposed a range from 0.060 to 0.070 ppm. Without knowing what the standard is, it is difficult for not only states to plan, but also for facilities, such as ExxonMobil, to evaluate whether the State may require additional reductions from the source.
Designation of the Nonattainment Areas	o The CAA requires that USEPA issue designations no later than two years after promulgation of the standard, and allows for an extension of one year. The regulated community, including ExxonMobil, and Illinois EPA do not know whether USEPA will take one, two, or three years to issue designations. o The designations for the last ozone standard to be fully implemented, the 1997 standard, were not issued until seven years after the promulgation of the standard due to litigation. Since it is unknown what the 2011 standard will be, it is possible that there could be a delay in the issuance of designations, if environmental groups or industry associations challenge the 2011 standard. o Not only is the timing of when the designations will be issued uncertain, but what the designations themselves will be is also uncertain. In terms of Chicago area, if the standard is set at 0.070 ppm, depending on the years of data available for designation, it is possible that the

	Chicago area could be designated in attainment rather than nonattainment. If USEPA chooses to leave the 75 ppb ozone NAAQS in place, all counties in the Chicago area have current air quality data attaining the 75 ppb ozone NAAQS. o Again, the uncertainty relates to the timing of the designations. If the designations occur three years after promulgation, in July 2014, it is possible that Chicago's data for 2011, 2012, and 2013 shows attainment of the standard. o Depending on the final standard, the Chicago area could be designated as a nonattainment area. If so, as discussed below, more uncertainty exists as to the classification of the Chicago nonattainment area.
Geographic size of the Non-attainment area	o The Will County area ozone monitor design value at YE 2010 is 62 ppb. o Some sources in Will County have already implemented significant NOx reductions. o It is possible that a case may be made that the Chicago non-attainment area be restricted to a smaller geographic size in the future. o In this instance, Will County sources would not be subject to RACT, although if modeling showed that emission reductions from sources in Will County were needed and effective in reducing ozone, Illinois EPA could ask for emission reductions from attaining areas as part of a non-attainment area SIP revision.
Classification of the Nonattainment Area	o At the time of designation or thereafter, USEPA will classify each nonattainment area as marginal (3 years to attain), moderate (6 years to attain), serious (9 years to attain), severe (15 years to attain), or extreme (20 years to attain). o At this time, ExxonMobil has no indication from USEPA or Illinois EPA as to whether the Chicago area,

	if designated nonattainment for the 2011 standard, will be classified as marginal, moderate, or a higher level of nonattainment. o Classification of the area also has an impact on the timeline for attainment. The CAA allows attainment deadlines to be set 3 to 20 years (depending on the severity of the nonattainment) from the date of designation, which, again, is also subject to timing adjustments. o In the case of the Chicago area, depending on the classification, the attainment date could range from 3 to 20 years from the date of designation. In the case of the 1997 standard, a moderate nonattainment area had six years to attain the standard. o In terms of NOx RACT requirements, classification of the Chicago area as marginal, which could be a possibility depending on whether the standard is set at the high or low end of the proposed range, would mean that RACT is not required. However, if classified as moderate or above nonattainment area, RACT requirements will be required for sources. o At this time, because there is no way to know whether the classification will be marginal, moderate, or higher, there is uncertainty regarding whether any RACT requirements will be necessary.
RACT SIP Revision Submittal	o The CAA requires a RACT SIP submittal within three years from the promulgation of the standard and allows for an 18 month extension. In terms of the 2011 standard, the RACT SIP submittal could occur any time between the anticipated promulgation of the standard in July 2011 and the 4.5 year statutory timeframe or by January 2016 or even later. Since states will require sufficient time for submitting SIP revisions, at minimum, USEPA may allow 3 years for the SIP submittal or by July 2014. Again, however, there is uncertainty as to how long USEPA will allow for RACT SIP revisions. o For the 1997 standard, USEPA adopted a rule requiring

	submittal of the RACT SIP revisions no later than 27 months after designation. If USEPA adopted a similar timeframe and the designations are issued in July 2013, RACT SIP revisions would be due in October 2015. o At this time, the regulated community, including ExxonMobil, and Illinois EPA do not know USEPA's timeframe for requiring the RACT SIP revision, which, in either case described above, will be based on the date of promulgation or designation, both of which are unknown.
RACT Implementation at Sources	o Neither ExxonMobil and the regulated community nor Illinois EPA, at this time, can possibly know the date by which NOx RACT will be required at sources, that is, if NOx RACT is even required, which depends on the designation and classification of the Chicago area. o Under the 1997 standard, USEPA required implementation of RACT at sources no later than the first ozone season or portion thereof which occurred 30 months after the RACT SIP was due. If the 1997 standard rule applied to the 2011 standard, RACT would be required to be implemented at sources by January 2017 or as late as July 2018, depending on whether the RACT SIP submittal is due earlier rather than later, which is based on the date of promulgation or designation. o There are many uncertainties to consider when trying to determine when NOx RACT will be required at the source. Furthermore, implementation of NOx RACT may not even be necessary, depending on the designation and classification of the Chicago area and non-attainment area size. o In addition, depending on the standard adopted and classification of the Chicago area, NOx RACT may be the same as what is required by the current Rule or may be more or less stringent.

Attainment Date	o The attainment date is based on the date of promulgation of the designations. The CAA provides that attainment can range from 5 to 10 years for Subpart 1 areas and 3 to 20 years after the designation date for Subpart 2 areas. Since 1990, USEPA has been using Subpart 2 provisions to set attainment dates from 3 to 20 years. o Again, in this case, the regulated community and Illinois EPA do not know when the designations will occur. Assuming that USEPA promulgates a standard in July 2011, designations could occur one to three years later. Thus, if designations occurred two years after promulgation and USEPA required attainment in 3 years, the attainment date would be July 2016. However, if designation occurs three years after promulgation, and USEPA required 20 years for attainment, the attainment date would be 2034. Thus, there is a large range of possible attainment dates for the 2011 standard. o Further, USEPA has not determined the classification for the Chicago area, if it is designated as nonattainment. Typically, the attainment date is related to the severity of the nonattainment. For example, for the 1997 standard, moderate nonattainment areas had six years from designation or until June 2010 to attain the standard. If the 2011 standard follows the 1997 standard implementation schedule, designations occur in two years, and the Chicago area is classified as moderate, the attainment date will be May 2019.

The following table demonstrates the uncertainties associated with the timeframes in which certain actions could be taken. As referenced in Table 1 above, there is substantial uncertainty as to the exact date of when several of the steps in the implementation of the 2011 standard will take place.

Table 2

ACTIVITY	2011 Standard Timeline (based on CAA)	1997 Standard Timeline (for comparison purposes)
Promulgation of Final Rule	July 2011	July 1997
Final Area Designations *(No later than two years after promulgation of a standard. Deadline can be extended for one year. 42 U.S.C. § 7407(d)(1)(B))*	July 2012 to July 2014	April 2004
Submittal of NOx RACT SIP *(Shall submit within 3 years after promulgation of the standard. Deadline can be extended for 18 months. 42 U.S.C. § 7410(a)(1))*	July 2014 to January 2016	July 2006[4] *(No later than 27 months after designation. 40 C.F.R. § 51.912(a))*
Implementation of NOx RACT at Sources *(Implementation of RACM as expeditiously as practicable. 42 U.S.C. § 7502(c)(1); implementation of RACT as expeditiously as practicable. 42 U.S.C. § 7511(a)(2))*	2014-2024	May 2009[5] *(No later than the first ozone season or portion thereof which occurs 30 months after the RACT SIP is due. 40 C.F.R. § 51.912(a))*
Attainment Date *(No later than 5 years from designation, but no more than 10 yeas from designation. 42 U.S.C. § 7502(a)(2)(A); 3 to 20 years from designation depending on classification. 42 U.S. C. § 7511 (a))*	2016 to 2034	June 2010[6] *(Six years after the effective date of the designation. 40 C.F.R. § 51.903)*

[4] Illinois EPA failed to meet this deadline. *See* 73 Fed. Reg. 15416 (Mar. 24, 2008) (where USEPA found that Illinois EPA failed to make a RACT submittal as required for its two nonattainment areas).

[5] The Illinois EPA's NOx RACT Rule was not finalized until August 2009. It is not required for purposes of demonstrating attainment with the 1997 standard. *See* 76 Fed. Reg. 9655 (Feb. 22, 2011) (where USEPA approved Illinois EPA's request for a NOx RACT waiver).

[6] USEPA stated that the 2007-2009 data for the Chicago area shows attainment of the 1997 standard. *See* 76 Fed. Reg. 9655 (Feb. 22, 2011).

B. Uncertainties Resulting From the 2011 Standard Impose an Unreasonable Hardship on ExxonMobil.

Because the 2011 standard will not be promulgated until later this year, ExxonMobil, as well as the regulated community at large, is left with uncertainty regarding what the final standard will be, whether the Chicago area will be designated nonattainment, and if so, what the classification will be, when RACT SIP submittals will be due, whether RACT will even be necessary, the timeline for implementation, how will NOx RACT be defined at that time, and what the attainment date will be. In addition, the regulated community, including ExxonMobil, cannot know, at this time, what Illinois EPA's response to the 2011 standard will be. To require ExxonMobil to move forward with implementing the requirements of the existing State Rule poses an unreasonable hardship on ExxonMobil. As described in Tables 1 and 2 above, there is uncertainty at every step in the NAAQS promulgation to attainment process. The uncertainty goes beyond just the timing, i.e. what will the deadlines be. It also goes to the substance of the 2011 standard and whether RACT rules will even be required, and if so, how will NOx RACT be defined.

A variance from the December 31, 2014 deadline is necessary in order to allow ExxonMobil to ease the hardship of compliance with the unsupported and arbitrary NOx RACT Rule. If a variance is not granted from the 2014 deadline, ExxonMobil will be required to move forward with its planning and installation of NOx RACT at the Refinery, incurring significant costs. At this time, NOx RACT is not needed to attain the 1997 standard, and it may not be needed to attain the 2011 standard. If it is required for

the 2011 standard, the current NOx RACT Rule may not suffice because USEPA has already indicated that the Rule is not approvable as RACT. *See* Illinois EPA Letter at 2.

In addition, as explained in Section X below, the installation of NOx RACT must be coordinated with the Refinery's planned maintenance turnaround. The next scheduled turnaround in which NOx RACT controls could be installed is scheduled for Winter 2018/Spring 2019. To require ExxonMobil to install unnecessary controls pursuant to this Rule could result in an unplanned maintenance shut down of the Refinery, which could cause a disruption in gasoline supplies in the Midwest, as well as higher fuel prices. It is imperative that compliance with the Rule be delayed until the next planned turnaround, and as noted above, Illinois EPA recognized in the rulemaking to adopt the NOx RACT Rule that extended compliance dates to coincide with planned maintenance turnarounds are justified. *See* Post-Hearing Comments at 12; Second Motion to Amend Rulemaking Proposal, R08-19 at 2, 5, 6-7, and 13-14 (Ill.Pol.Control.Bd. Mar. 23, 2009) (discussing the addition of Section 217.152(c) and Appendix H) (hereafter "Second Motion to Amend"); Pre-filed Testimony of Robert Kaleel, R08-19 at 1 (Ill.Pol.Control.Bd. Jan. 20. 2009) (where Illinois EPA stated "recognizing the unique role of petroleum refineries in the region's economy, the Illinois EPA is recommending that the compliance date for refineries coincide with already planned maintenance turnarounds to avoid unplanned shut-downs and potential disruptions to the region's fuel supply").

A four-year and four-month variance from the December 31, 2014 compliance deadline will allow ExxonMobil to delay spending resources at this time to comply with

an arbitrary Rule until there is more certainty regarding the 2011 standard in terms of what the standard will be, the Chicago area's designation and classification, the timeline for RACT SIP submittals, and the attainment date. It is an unreasonable hardship to require compliance with the 2014 deadline when ExxonMobil will spend approximately $28 million to implement a Rule that is not necessary and may not be needed by or be sufficient for the 2011 standard. Further, ExxonMobil's substantial investment in control technology to comply with the Rule is a potentially misappropriated investment if NOx RACT is determined to be more or less stringent than what is required by the NOx RACT Rule.

III. REGULATIONS FROM WHICH VARIANCE IS SOUGHT

ExxonMobil is seeking a four-year and four-month variance from the December 31, 2014 deadline to comply with the applicable requirements of the NOx RACT Rule, which is set forth at 35 Ill. Admin. Code Part 217, Subparts A, D, E, F and Appendix H. Section 217.150(a) states, in relevant part:

> 1) The provisions of this Subpart and Subparts E, F, G, H, I, and M of this Part apply to the following:
>
> A) All sources that are located in either one of the following areas and that emit or have the potential to emit NOx in an amount equal to or greater than 100 tons per year:
>
> i) The area composed of the Chicago area counties of Cook, DuPage, Kane, Lake, McHenry, and Will, the Townships of Aux Sable and Goose Lake in Grundy County, and the Township of Oswego in Kendall County; or
>
> ii) The area composed of the Metro East area counties of Jersey, Madison, Monroe, and St. Clair, and the Township of Baldwin in Randolph County; and

B) 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 at such sources described in subsection (a)(1)(A) of this Section that emits NOx in an amount equal to or greater than 15 tons per year and equal to or greater than five tons per ozone season.

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

35 Ill. Admin. Code § 217.150(a). The NOx RACT Rule is applicable to ExxonMobil's Joliet Refinery because it is located in Will County and has the potential to emit 100 tons of NOx per year. Pursuant to Section 217.152, sources subject to the Rule must comply as follows:

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, 2012.

* * *

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, 2012, except that the owner or operator of emission units listed in Appendix H must comply with the requirements of this Subpart, including the option of demonstrating compliance with the applicable Subpart through an emissions averaging plan under Section 217.158 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.

35 Ill. Admin. Code § 217.152(a) and (c). (Emphasis added.) Since ExxonMobil is a petroleum refinery that owns or operates emission units subject to Subpart E (Industrial Boilers) or Subpart F (Process Heaters), it must comply with the January 1, 2012 deadline, except for emission units listed in Appendix H. For non-Appendix H units that are subject to the January 1, 2012 deadline, ExxonMobil will comply with the Rule's requirements by the deadline, January 1, 2015, proposed in the 2011 rulemaking currently pending before the Board.

Emission units listed in Appendix H must comply with the Rule's requirements by the deadline listed in the Appendix. Appendix H provides, in relevant part:

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

35 Ill. Admin. Code Part 217, Appendix H. Note that in the 2011 Rulemaking pending before the Board, Illinois EPA proposes to delete the above-referenced section of Appendix H, presumably because the proposed extension of the general compliance

deadline until January 1, 2015 is beyond the compliance deadline for ExxonMobil's Appendix H units. As discussed in detail above, ExxonMobil is requesting a four-year and four-month variance from the December 31, 2014 compliance deadline, and thus, ExxonMobil's deadline for implementing the requirements of the NOx RACT Rule for units listed in Appendix H will be May 1, 2019, should the Board grant this Petition.

IV. ACTIVITY OF EXXONMOBIL

A. ExxonMobil's Joliet Refinery and Operations Description

The ExxonMobil Joliet Refinery, which began operating in 1972, is on a 1,300-acre tract of land located in Channahon Township in unincorporated Will County. The site is adjacent to Interstate 55 at the Arsenal Road exit, approximately 50 miles southwest of Chicago. To the immediate north of the Refinery is the Des Plaines River, while east and south is the former Joliet Army Arsenal, which has been redeveloped as an industrial complex and the Midewin National Tallgrass Prairie.

The Refinery employs approximately 630 full time employees, who operate, maintain, and manage the facility, which operates 24 hours a day. In addition to ExxonMobil's employees, an estimated 300 contractor employees work full time at the Refinery providing primarily maintenance services. During turnarounds, when portions of the Refinery are shut down for construction or large-scale maintenance projects, approximately 2,000 contractor employees are on site.

The Refinery processes crude oil and is capable of processing approximately 248,000 barrels per day (nearly 10.4 million gallons per day). The Refinery not only

produces approximately 10.4 million gallons a day of gasoline, but also produces liquefied petroleum gas, propylene, asphalt, sulfur, and petroleum coke.

B. Location of Points of Discharge

As stated above, ExxonMobil is seeking a variance from the December 31, 2014 NOx RACT Rule deadline for Appendix H units. There are twenty process heaters/boilers at the Refinery, including eight process heaters listed in Appendix H, that are subject to either the January 1, 2012 or December 31, 2014 deadline. The following table lists all of the process heaters/boilers subject to the Rule and identifies the Appendix H units; however, a variance is only being sought for the Appendix H units:

Heater / Boiler Name	ID#	Emission Point	Appendix H Unit
Crude Atmospheric Heaters	1-B-1A/B	0018	Yes
Crude Vacuum Heaters	13-B-2	0019	Yes
Alky-Iso-Stripper Reboiler, Gas	7-B-1	0038	Yes
Alky-Iso-Stripper Reboiler, ASO	7-B-1	0038	Yes
PreTreater Debutanizer Reboiler	17-B-2		No
Reformer Debutanizer Reboiler	2-B-7		No
CHD Stripper Reboiler Heater	3-B-2	0034	Yes
Saturate Gas Plant Reboiler	8-B-1		No
Coker East & West Charge Heaters	16-B-1A/B	0021	Yes
Crude Unit Feed Preheater	1-B-3, 13-B-4		No
PreTreater Reactor Charge Heater	17-B-1		No
Reformer Charge Heaters	2-B-3/4/5/6		No
CHD Charge Heater	3-B-1	0033	Yes
Hot Oil Heater	21-B-1		No

Heater / Boiler Name	ID#	Emission Point	Appendix H Unit
FCC Preheater	4-B-1		No
Auxiliary Boiler	55-B-100		No

The Illinois EPA maintains a statewide network of air quality monitoring stations. The ozone and PM2.5 monitoring station nearest to the Refinery is located at 36400 S. Essex Road, Braidwood, Will County. *See* Illinois EPA 2009 Annual Air Quality Report at 40 (November 2010) (listing the monitoring stations located in Will County). A second PM2.5 monitoring station is located near the Refinery at Midland and Campbell Streets, Joliet, Will County. *Id.*

C. Prior Variance(s) Issued to ExxonMobil or Any Predecessor Regarding Similar Relief

Neither ExxonMobil, nor any of its predecessors, has been issued a prior variance regarding relief that is similar to what is requested in this Petition.

D. Identification of Permits

ExxonMobil operates the Refinery pursuant to a Title V Clean Air Act Permit Program ("CAAPP") permit issued by Illinois EPA on August 15, 2000.[7] *See* CAAPP Permit No. 95120304. A timely renewal application was submitted to Illinois EPA on November 4, 2004 with addendums to the application submitted on July 7, 2007 and February 16, 2011. Since the issuance of the CAAPP permit, ExxonMobil has also obtained several construction and operating permits for various projects at the Refinery. Such permits will not be affected by this variance request. ExxonMobil will continue to

[7] A revision to the CAAPP permit was issued on December 31, 2002. The revision incorporated a minor modification that revised the ERMS baseline, allotment of ATUs, incorporated changes to a construction permit, and corrected typographical errors.

construct and operate any emission units in accordance with the conditions of its CAAPP permit and construction and operating permits.

The NOx RACT Rule, although not necessary to meet any federal requirements, is still a State rule in effect for subject sources. Thus, should Illinois EPA act on ExxonMobil's pending CAAPP renewal application, the NOx RACT Rule would likely be incorporated into a State only requirements section of a draft CAAPP permit, and any such incorporation should include a reference to the Board's decision in this matter.

E. Number of Persons Employed & Age of Facility

Construction of the Refinery began in 1970, and as stated above, operations at the facility began in 1972. Currently, there are approximately 630 full time ExxonMobil employees at the Refinery, and at least 300 full time employees of contractors that work at the Refinery.

F. Nature and Amount of Materials Used In Activity for Which Variance Is Sought and a Full Description of the Particular Process or Activity in Which the Materials Will be Used

This variance is being sought only for the process heaters at the Refinery that are subject to the NOx RACT Rule's December 31, 2014 deadline in Appendix H. These process heaters are used for indirect heat transfer within process units at the Refinery. The process heaters subject to the Rule are used in the process of converting crude oil and purchased intermediate material into gasoline, diesel fuel, and other finished products. Refinery fuel gas (including in combination with natural gas) is combusted in these process heaters and is directly related to emissions from the process heaters. The Refinery combusted refinery fuel gas (and natural gas) in an amount equivalent to

19,108,535 million BTUs in 2010 in the production of heat for purposes of producing gasoline and other products.

G. A Description of the Relevant Pollution Control Equipment Already in Use

For purposes of controlling emissions from fuel combustion emission units, typically low NOx burners are employed as opposed to add on controls. In regards to the process heaters/boilers covered by the NOx RACT Rule, ten of the units are already equipped with "next generation low NOx burners," designed to achieve a maximum NOx emission rate of 0.05 lb/mmBtu or less. Additionally, the Refinery has recently installed an SCR at the Refinery's FCCU/CO Boilers, which are the single largest source of NOx emissions at the Refinery. The SCR will reduce NOx emissions in excess of what will be achieved by compliance with requirements of the NOx RACT Rule. *See* Sections IV.H and IX for additional discussions on NOx emission reductions.

H. Nature and Amount of NOx Emissions Currently Generated by Petitioner's Activity

As reported in the Refinery's 2010 Annual Emissions Report, NOx emissions from the Refinery totaled 3,077 tons/yr, of which approximately 941 tons were attributable to the Appendix H emission units for which this variance is being sought, and a total of 1,133 tons were attributable to all emission units combined, i.e. both Appendix H and non-Appendix H units, subject to the Rule (see list of units in Section IV.B). NOx emissions from the FCCU/CO Boilers during this same time were 1,497 tons. A full year projection of NOx emissions following the installation of the SCR, based on the same operating rates as 2010, will result in approximately 160 tons/yr of emissions from the

FCCU, a reduction in excess of eighty-five percent of NOx emissions from the FCCU, and an over forty percent reduction of NOx emissions from the entire Refinery. The approximate NOx emissions reductions resulting from compliance with the NOx RACT Rule is about 370 tons/yr, which is well below the approximate 1,300 ton reduction from the FCCU. As noted previously, ExxonMobil has submitted a construction permit application to implement a NOx control strategy that accounts for the emission reductions from the FCCU as compliance with the NOx RACT Rule requirements.

V. COMPLIANCE WITH THE REGULATION CANNOT BE ACHIEVED BY THE COMPLIANCE DATE.

The NOx RACT Rule requires compliance by December 31, 2014 for the Appendix H units at ExxonMobil's Refinery. However, as explained above, the NOx RACT Rule is not required by the CAA, as the Chicago area has attained the 1997 standard, and the Rule is an unreasonable hardship on ExxonMobil. *See* Sections I and II. ExxonMobil, though, has already undertaken actions to comply with the existing January 1, 2012 deadline for the non-Appendix H units. Had ExxonMobil been timely notified of the Illinois EPA's NOx RACT waiver request, some of these costs could possibly have been delayed or eliminated until RACT controls are required. Further, compliance with the December 31, 2014 deadline applicable to the emission units listed in Appendix H cannot be achieved without incurring significant hardship by ExxonMobil. The approval of Illinois' NOx RACT waiver request renders the NOx RACT requirements arbitrary because attainment has already been met and there is no legal basis for the Rule. In addition, the uncertainties resulting from the impending promulgation of the 2011 standard makes moving forward with implementation of the

Rule an unreasonable hardship because ExxonMobil, as well as the regulated community at large and Illinois EPA, cannot know whether the Rule will be required by the 2011 standard or approvable as RACT for the 2011 standard. It is necessary, however, to obtain a variance from the December 31, 2014 deadline because planning and the expenditure of resources has already started for the implementation of controls to meet the 2014 deadline. ExxonMobil, as discussed in detail below, will start to incur significant costs in the 3rd and 4th Quarters 2011 to begin installation of controls at the Refinery, pursuant to an arbitrary Rule.

VI. EFFORTS NECESSARY TO ACHIEVE IMMEDIATE COMPLIANCE

In order to comply with the December 31, 2014 deadline, ExxonMobil will begin spending approximately $2.5 million in the 3rd and 4th Quarters of 2011 of an estimated $28 million to comply with the December 31, 2014 deadline. The expenditure of these costs is unnecessary because they will be spent to bring the Refinery into compliance with a Rule that has no basis in the CAA. Efforts to install controls will include planning and designing an appropriate strategy for installing and implementing the necessary controls, ordering the equipment, and constraining or shutting down operations for installation of the control equipment. All such efforts and the monetary expenditures associated with each stage of installation and implementation are unnecessary at this time because they are not required by the CAA.

Further, compliance with the December 31, 2014 deadline means that ExxonMobil is implementing projects that are not needed to attain a current standard and may not be needed to attain a future standard. Even if RACT is required for the 2011

standard the NOx RACT Rule may not be sufficient. Accordingly, efforts to achieve immediate compliance would include spending significant resources to implement NOx RACT when it is not required and uncertain as to whether it will be in the future.

VII. ARBITRARY OR UNREASONABLE HARDSHIP

Compliance with the Rule's December 31, 2014 deadline for implementation of NOx RACT for the emissions units listed in Appendix H is arbitrary because, in the simplest of terms, the NOx RACT Rule is not required by the CAA. In addition, as noted above, Illinois EPA's pending proposal to extend the general compliance deadline to January 1, 2015 is also arbitrary because not only is the Rule not required, but there is no basis for the 2015 deadline. USEPA and Illinois EPA have determined that the Rule was not needed for attainment of the 1997 standard. Further, according to USEPA, the Rule is not approvable as RACT. Because the Rule is neither required nor needed for attainment, mandating compliance with the December 31, 2014 deadline is arbitrary. *See* Section I.C. for detailed discussion on the arbitrariness of the Rule.

Compliance with the December 31, 2014 deadline also imposes an unreasonable hardship on ExxonMobil. The uncertainty as to whether NOx RACT rules will be required, and if so, when they will be required restricts ExxonMobil's planning implementation of projects at the Refinery. If NOx RACT is required, Tables 1 and 2 illustrate the varied range of dates and scenarios surrounding the promulgation of the 2011 standard and subsequent designations. ExxonMobil has already spent approximately $3 million to comply with the 2012 deadline, and this year, it will start spending considerable resources to comply with the 2014 deadline should a variance not

be granted. *See* Section II.A and B for detailed discussion on the uncertainties involved in this case and the unreasonable hardship on ExxonMobil.

VIII. COMPLIANCE PLAN AND SUGGESTED CONDITIONS

As discussed throughout this Petition, the NOx RACT Rule is arbitrary and poses an unreasonable hardship on ExxonMobil. At this time, neither ExxonMobil nor Illinois EPA knows whether NOx RACT will be required for a future ozone standard. Accordingly, a delay in compliance with the Rule is warranted. ExxonMobil suggests that the compliance plan consist of the requirement to comply with applicable requirements by the requested extended deadline. ExxonMobil recommends the following condition should the Board grant this variance request:

a. ExxonMobil is not required to comply by December 31, 2014, with 35 Ill. Admin. Code Part 217, Subparts A, D, E, F, and Appendix H, as applicable to the units listed in Appendix H.

b. ExxonMobil shall comply with the applicable NOx RACT requirements of Part 217 by May 1, 2019 for the following emission units listed in 35 Ill. Admin. Code Part 217, Appendix H:

Point	Emission Unit Description	Compliance Date
0019	Crude Vacuum Heater (13-B-2)	May 1, 2019
0038	Alky Iso-Stripper Reboiler (7-B-1)	May 1, 2019
0033	CHD Charge Heater (3-B-1)	May 1, 2019
0034	CHD Stripper Reboiler (3-B-2)	May 1, 2019
0021	Coker East Charge Heater (16-B-1A)	May 1, 2019
0021	Coker East Charge Heater (16-B-1B)	May 1, 2019
0018	Crude Atmospheric Heater (1-B-1A)	May 1, 2019
0018	Crude Atmospheric Heater (1-B-1B)	May 1, 2019

IX. ENVIRONMENTAL IMPACT

As discussed above, ExxonMobil has significantly decreased its NOx emissions through use of an SCR at the FCCU/CO Boilers. This reduction is substantially larger than the NOx reduction resulting from compliance with the Rule. Should this variance be approved, based on 2010 actual emissions, an approximate 370 tons/yr NOx emission reduction, which is scheduled to occur following the December 31, 2014 deadline, would be delayed until 2019. Instead however, the installation of the SCR on the FCCU/CO Boilers will result in a total reduction in excess of 1,300 tons/yr beginning in 2011.

If the Board grants the requested variance, there will be little or no impact on human health and the environment compared to the impact if immediate compliance with the Rule is required because the Chicago area has attained the 1997 standard. Illinois EPA proposed the NOx RACT Rule in order to obtain the emission reductions necessary to attain the 1997 standard. Both Illinois EPA, by its NOx waiver request, and USEPA, by its approval, have acknowledged that implementation of the NOx RACT Rule is not necessary to reach attainment since, in fact, the Chicago area is in attainment with the 1997 standard. Since attainment of the 1997 standard has been reached prior to implementation of the Rule, there is little environmental impact, if any, in delaying the implementation of the Rule for ExxonMobil's Refinery. As previously discussed, the Refinery has reduced its NOx emissions substantially over the last few years and will continue to do so pursuant to the requirements of its Consent Decree. In addition, during the variance period, ExxonMobil will begin planning for implementation of the NOx

RACT requirements should applicable NOx RACT Rule requirements remain in effect or should new NOx RACT rules be adopted by the Board.

In addition, over the next few years, several large facilities in the Chicago area will be shut down, resulting in a significant decrease of NOx emissions. *See* "Aging Indiana Power Plant to Shut down, Cutting Chicago-area Air Pollution," Chicago Tribune (May 5, 2011) (stating that the State Line Power Plant will shut down no later than 2014 and that Midwest Generation will clean up or shut down its Chicago area plants by 2018). Thus, during the requested variance period, there will be additional significant NOx emission reductions in the Chicago area.

X. PROPOSED VARIANCE PERIOD

ExxonMobil proposes that the four-year and four-month variance period begin on December 31, 2014 and end on May 1, 2019. As explained above, the NOx RACT Rule is not federally required, and furthermore, it is not currently approvable by USEPA as NOx RACT. Therefore, requiring compliance with the Rule is not only arbitrary, but it is also unreasonable considering that ExxonMobil will spend approximately $28 million to implement the controls required by the Rule, which may not even be necessary or sufficient depending on the 2011 standard. In this case, beginning the variance period on December 31, 2014 rather than on the date that the Board takes final action on this Petition is justified because of the long lead times needed to implement the NOx RACT controls, and because of the uncertainty as to whether the Rule will be considered RACT for the 2011 standard or whether RACT will be needed at all.

A four-year and four-month variance is also necessary for practical purposes in order to postpone compliance with the Rule until a time when the Refinery is scheduled to be temporarily shut down for a maintenance turnaround. ExxonMobil typically completes maintenance turnarounds for the Refinery on a five- to six-year cycle. Early or unscheduled turnarounds to install controls on the Refinery's process heaters could disrupt the fuel supply throughout the Midwest, potentially causing significantly higher gasoline and diesel fuel costs, as acknowledged by Illinois EPA in the NOx RACT rulemaking, where Illinois EPA revised its proposal to include extended compliance dates for petroleum refineries. *See* Second Motion to Amend at 2, 5, 6-7, and 13-14. The next Refinery turnaround beyond December 31, 2014, is scheduled for Winter 2018/Spring 2019, and accordingly, ExxonMobil is requesting a four-year and four-month variance from the December 31, 2014 deadline until May 1, 2019, which would allow for the installation of required NOx controls during the scheduled Winter 2018/Spring 2019 turnaround.

XI. CONSISTENCY WITH FEDERAL LAW

Under Title IX of the Act, 415 ILCS 5/35-38, the Board is responsible for granting variances when a petitioner demonstrates that immediate compliance with the Board regulation(s) would impose an "arbitrary or unreasonable hardship" on the petitioner. 415 ILCS 5/35(a). The Board may grant a variance, however, only to the extent consistent with applicable federal law. *See* 415 ILCS 5/35(a).

Section 104.208(a) of the Board rules states the following with regard to consistency with federal law for all petitions for variances from the Board's air regulations:

> a) All petitions for variances from Title II of the Act or from 35 Ill. Adm. Code.Subtitle B, Ch. I "Air Pollution", must indicate whether the Board may grant the requested relief consistent with the Clean Air Act (CAA) (42 USC 7401 et seq.) and the federal regulations adopted pursuant thereto. If granting a variance would require revision of the State Implementation Plan, the petition must indicate whether the requirements of Section 110(a) of the CAA (42 USC 7410(a)) and 40 CFR 51 will be satisfied.

35 Ill. Admin. Code § 104.208(a). In this situation, there are no applicable federal laws or regulations that preclude granting the instant variance request. As referenced above, the NOx RACT Rule is not required by the CAA. Therefore, the variance is consistent with federal law. In addition, granting this variance request would not require a revision to the SIP, as Illinois EPA intends to withdraw its NOx RACT SIP submittal.

XII. WAIVER OF REQUEST FOR HEARING

Pursuant to 35 Ill. Admin. Code § 104.204(n), ExxonMobil waives its right to a hearing on this Petition.

XIII. AFFIDAVIT IN SUPPORT

In support of this Petition, ExxonMobil is filing the Affidavit of Matthew J. Kolesar, which is attached hereto as Exhibit 3.

XIV. CONCLUSION

The NOx RACT Rule is not required by the CAA, and thus, it is an arbitrary rule until such time NOx RACT requirements are required by the CAA. Compliance with the Rule at this time also poses an unreasonable hardship because ExxonMobil is incurring

significant costs to comply with the Rule, when there is uncertainly as to whether NOx RACT will be required. In addition, to require the installation of unnecessary NOx RACT controls at the Refinery when there is no turnaround scheduled until Winter 2018/Spring 2019 is unreasonable and burdensome because it will require ExxonMobil to initiate an unplanned shut down of the Refinery, possibly causing significant disruptions in fuel supplies and gasoline prices, depending on how long the Refinery is shut down. Accordingly, because the NOx RACT Rule is arbitrary and imposes an unreasonable hardship on ExxonMobil, the Board should grant this request for a four-year and four-month variance from the December 31, 2014 compliance deadline for Appendix H units.

WHEREFORE, Petitioner, ExxonMobil Oil Corporation, respectfully requests that the Board grant a four-year and four-month variance to May 1, 2019 from the December 31, 2014 compliance deadline for the NOx RACT Rule.

Respectfully submitted,

EXXONMOBIL OIL CORPORATION,
Petitioner,

DATE: May 17, 2011

By: /s/ Monica T. Rios
One of Its Attorneys

Katherine D. Hodge
Monica T. Rios
HODGE DWYER & DRIVER
3150 Roland Avenue
Post Office Box 5776
Springfield, Illinois 62705
(217) 523-4900

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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PAT QUINN, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

217/782-7326
217/782-9143 (TDD)

July 29, 2010

Dr. Susan Hedman, Regional Administrator
Office of the Regional Administrator, R-19J
U. S. Environmental Protection Agency, Region 5
77 West Jackson Boulevard
Chicago, Illinois 60604-3507

Re: Control Technique Guidelines SIP Submittal and NOx RACT Waiver Request

Dear Dr. Hedman:

The Illinois Environmental Protection Agency (Illinois EPA), on behalf of the State of Illinois, hereby submits the enclosed three amendments to Illinois' State Implementation Plan (SIP) for ozone pursuant to Sections 172(c)(1) and 182(b)(2) of the Clean Air Act (CAA) (42 U.S.C. §§ 7502 and 7511a) and Sections 4, 10, 27, and 28 of the Illinois Environmental Protection Act (415 ILCS 5/4, 10, 27, and 28):

1. Group II Consumer and Commercial Product Categories: Industrial Cleaning Solvents, Flat Wood Paneling Coatings, Flexible Packaging Printing Materials, Lithographic Printing Materials, and Letterpress Printing Materials.

2. Group III Consumer and Commercial Product Categories: Paper, Film, and Foil Coatings, Metal Furniture Coatings, and Large Appliance Coatings.

3. Group IV Consumer and Commercial Product Categories: Miscellaneous Metal and Plastic Parts Coatings, Auto and Light-Duty Truck Coatings, Miscellaneous Industrial Adhesives, and Fiberglass Boat Manufacturing Materials.

These rules are intended to meet the obligations of the State of Illinois under the CAA to submit a revision to the SIP to address requirements under Sections 172 and 182 for sources of volatile organic materials (VOM) emissions in areas designated as nonattainment with respect to the ozone National Ambient Air Quality Standard (NAAQS). Section 172(c)(1) of the CAA provides that states must include in their SIPs for nonattainment areas "reasonably available control measures" (RACM), including "reasonably available control technology" (RACT), for sources of emissions. Section 182(b)(2) of the CAA provides that, for ozone nonattainment areas, the State must revise its SIP to include RACT for sources of VOM emissions covered by a control techniques guideline (CTG) issued between November 15, 1990, and the date of attainment. U.S. EPA issued final CTGs for Group II Consumer and Commercial Product Categories on October 5, 2006, final CTGs for Group III categories on October 9, 2007, and final CTGs for Group IV categories on October 7, 2008.

EXHIBIT
1
tabbies

On July 9, 2009, the Illinois EPA filed a regulatory proposal for the Group II CTG categories with the Office of the Clerk of the Pollution Control Board (Board). The Board docketed this proposed rulemaking as PCB R10-8 and issued a Notice of Hearings on August 12, 2009. Public hearings were held on October 27, 2009 and December 8, 2009. The Board adopted the rule and issued its Final Order on June 17, 2010 and the Notice of Adopted Amendments was published in the *Illinois Register* on July 9, 2010. The complete docket for the rulemaking is available on the Board's website at http://www.ipcb.state.il.us/COOL/External/CaseView.aspx?case=13733.

For the Group III CTG categories, the Illinois EPA filed a regulatory proposal with the Board on October 23, 2009. The Board docketed this proposed rulemaking as PCB R10-10 and issued a Notice of Hearings on November 5, 2009. Public hearings were held on December 9, 2009 and January 6, 2010. The Board adopted the rule and issued its Final Order on March 18, 2010 and the Notice of Adopted Amendments was published in the *Illinois Register* on April 9, 2010. The complete docket for the rulemaking is available on the Board's website at http://www.ipcb.state.il.us/COOL/external/CaseView.aspx?referer=results&case=13766.

Illinois' rulemaking process has almost been completed for the Group IV CTG categories and the Illinois EPA requests parallel processing while the rule is being reviewed by the Joint Committee on Administrative Rules (JCAR), and published as an adopted rule in the *Illinois Register*. The Illinois EPA filed a regulatory proposal with the Board on March 8, 2010. The Board docketed this proposed rulemaking as PCB R10-20 and issued a Notice of Hearings on March 18, 2010. Public hearings were held on April 28 and May 19, 2010. The Board adopted the rule for second notice review by JCAR on July 15, 2010. The rulemaking documentation is being submitted here with this request for parallel processing. When the proposal is printed as an adopted rule in the *Illinois Register*, this SIP submittal will be supplemented with an addendum that includes the final rule as published. The complete docket for the rulemaking is available on the Board's website at http://www.ipcb.state.il.us/COOL/External/CaseView.aspx?case=13839.

In order to assist with your review of this SIP submittal, two paper copies and an electronic disk of the rulemaking documentation for the three rules are enclosed. A list of the enclosed documents is also attached.

The Illinois EPA also requests a waiver from the RACT requirement for major stationary sources of nitrogen oxides (NO_x) in both the Chicago and Metro-East ozone nonattainment areas, as provided under Section 182(f) of the CAA for the 1997 8-hour ozone standard. Specifically, this request seeks to exempt major stationary sources of NOx (as defined in Section 302 and Subsections 182(c), (d), and (e) of the CAA) from the RACT requirements of Section 182(b)(2). Section 182(f)(1)(A) provides for a waiver of the NOx RACT requirement if "additional reductions of oxides of nitrogen would not contribute to attainment of the national ambient air quality standard for ozone in the area...". As quality assured monitoring data for 2006 through 2008 (and 2007 through 2009) demonstrate that the Chicago area has attained the 1997 8-hour ozone standard, and monitoring data for 2007 through 2009 demonstrate that the St. Louis area, including the Metro-East area in Illinois has also attained the 1997 8-hour ozone standard, additional NOx emission reductions would not contribute to attainment of the 1997 8-hour ozone NAAQS in the two Illinois nonattainment areas. Thus, these areas are therefore eligible for a waiver of the RACT requirement under Section 182(f) for the 1997 8-hour ozone standard.

Although the Illinois EPA is requesting a waiver from the NOx RACT requirement for the 1997 8-hour ozone standard, Illinois has already submitted final rules to U.S. EPA that meet or exceed NOx RACT control levels for major stationary sources in both the Chicago and Metro-East ozone nonattainment areas. On September 1, 2009, the Illinois EPA submitted to the U.S. EPA adopted rules for NOx emissions from stationary reciprocating internal combustion engines and turbines. On September 2, 2009, and supplemented on October 8, 2009, the Illinois EPA submitted to the U.S. EPA adopted rules for NOx emissions from various source categories, including industrial and utility boilers, process heaters, cement kilns, lime kilns, glass melting furnaces, aluminum melting furnaces, and reheat, annealing, and galvanizing furnaces at iron and steel plants. The Illinois EPA requests that U.S. EPA approve these rules as amendments to Illinois' SIP and intends that these rules will meet Illinois' NOx RACT requirements for the revised ozone standard expected to be promulgated in August 2010.

The Illinois EPA believes that this submittal, in conjunction with other submittals made previously to the U.S. EPA (e.g., emissions inventories, attainment plans, rate of progress plans, RACT requirements, maintenance plans, and transportation conformity budgets), will allow the U.S. EPA to expeditiously take the necessary actions to redesignate both the Chicago and Metro-East areas to attainment for the 1997 8-hour ozone standard.

If further information is required or should you have any questions, please feel free to contact Laurel L. Kroack, Chief of the Bureau of Air, at (217)785-4140.

Very truly yours,

Douglas P. Scott
Director

Attachments

cc: Cheryl L. Newton, U.S. EPA Region 5

Illinois State Implementation Plan
Group II, Group III, and Group IV
Control Technique Guidelines

List of Enclosed Documents

A. Group II

A1. Illinois EPA regulatory proposal, July 9, 2009 (certain documents omitted)

A2. Letter from Acting Chairman Girard to Director Ribley of the Department of Commerce and Economic Opportunity ("DCEO") regarding request for economic impact study, August 6, 2009

A3. Order of the Board by A.S. Moore, accepting the Illinois EPA's regulatory proposal for hearing, granting the Illinois EPA's request for waiver of copy requirements, and denying the Illinois EPA's Motion for Expedited Review, August 6, 2009

A4. Hearing Officer Order, Notice of Hearings, August 12, 2009

A5. Prefiled Testimony of David Bloomberg of Illinois EPA and Illinois EPA's Motion to Amend Rulemaking Proposal, September 14, 2009

A6. Order of the Board by A.S. Moore, granting the Illinois EPA's Motion to Amend Rulemaking Proposal, October 15, 2009

A7. Record of Hearing, October 27, 2009 (full transcript omitted)

A8. Hearing Officer Order, October 28, 2009

A9. Illinois EPA's Second Motion to Amend Rulemaking Proposal, December 7, 2009

A10. Record of Hearing, December 8, 2009 (full transcript omitted)

A11. Hearing Officer Order, December 9, 2009

A12. Post-Hearing Comment of Mostardi Platt Environmental, December 28, 2009

A13. Order of the Board by A.S. Moore, adopting the rulemaking proposal and ordering the clerk to file the proposal for first notice publication in the *Illinois Register*, January 7, 2010 (full text of rule omitted)

A14. Comments of Mostardi Platt Environmental, January 19, 2010

A15. *Illinois Register* Notice of Proposed Amendments (full text of rule omitted), 34 Ill. Reg. 1766, February 5, 2010

A16. First Notice Comments of the Illinois Environmental Protection Agency, February 17, 2010

A17. Comments of Mostardi Platt Environmental, April 9, 2010

A18. Comments of the Illinois Environmental Protection Agency, April 26, 2010

A19. Order of the Board by A.S. Moore, adopting the rule for second notice review by JCAR, May 6, 2010 (full text of rule omitted)

A20. Letter from Vicki Thomas of the Joint Committee on Administrative Rules ("JCAR") to Acting Chairman Girard, accepting rulemaking for second notice, May 18, 2010

A21. Comments of the Flexible Packaging Association, June 4, 2010

A22. Letter from Illinois EPA to Vicki Thomas of JCAR regarding response to Flexible Packaging Association's comments, June 10, 2010

A23. Letter from JCAR to Acting Chairman Girard and Certification of No Objection to Rulemaking Proposal, June 15, 2010

A24. Final Order of the Board by A.S. Moore, adopting the rule and ordering the clerk to file final rule for publication in *Illinois Register*, June 17, 2010 (full text of rule omitted)

A25. Notice of Publication of Adopted Rules, July 9, 2010

A26. *Illinois Register* Notice of Adopted Amendments, 34 Ill. Reg. 9069, July 9, 2010

B. Group III

B1. Illinois EPA regulatory proposal, October 23, 2009 (certain documents omitted)

B2. Order of the Board by A.S. Moore, accepting the Illinois EPA's regulatory proposal for hearing, granting the Illinois EPA's request for waiver of copy requirements, and ordering the clerk to file the proposal for first notice publication in the *Illinois Register*, November 5, 2009 (full text of rule omitted)

B3. Board Hearing Officer Order, Notice of Hearings, November 5, 2009

B4. Letter from Acting Chairman Girard to Director Ribley of the DCEO regarding request for economic impact study, November 5, 2009

B5. *Illinois Register* Notice of Proposed Amendments, 33 Ill. Reg. 16399, November 20, 2009 (full text of rule omitted)

B6. Letter from Vicki Thomas of JCAR to Acting Chairman Girard regarding request for analysis of effects of rulemaking on units of local government, school districts, or community college districts, November 19, 2009.

B7. Prefiled Testimony of Yoginder Mahajan of the Illinois EPA, November 24, 2009

B8. Record of Hearing, December 9, 2009 (full transcript omitted)

B9. Illinois EPA's Motion to Amend Rulemaking Proposal, December 28, 2009

B10. Record of Hearing, January 6, 2010 (full transcript omitted)

B11. Hearing Officer Order, January 11, 2010

B12. Order of the Board by A.S. Moore, adopting the rule for second notice review by JCAR, February 4, 2010 (full text of rule omitted)

B13. Letter from Vicki Thomas of JCAR to Acting Chairman Girard, accepting rulemaking for second notice, February 10, 2010

B14. Letter from JCAR to Acting Chairman Girard and Certification of No Objection to Rulemaking Proposal, March 11, 2010

B15. Final Order of the Board by A.S. Moore, adopting the rule and ordering the clerk to file final rule for publication in *Illinois Register*, March 18, 2010 (full text of rule omitted)

B16. Notice of Publication of Adopted Rules, April 8, 2010

B17. *Illinois Register* Notice of Adopted Amendments, 34 Ill. Reg. 5330, April 9, 2010

C. Group IV

C1. Illinois EPA regulatory proposal, March 8, 2010 (certain documents omitted)

C2. Letter from Acting Chairman Girard to Director Ribley of the DCEO regarding request for economic impact study, March 18, 2010

C3. Board Hearing Officer Order, Notice of Hearings, March 18, 2010

C4. Order of the Board by A.S. Moore, accepting the Illinois EPA's regulatory proposal for hearing, granting the Illinois EPA's request for waiver of copy requirements, and ordering the

clerk to file the proposal for first notice publication in the *Illinois Register*, March 18, 2010 (full text of rule omitted)

C5. *Illinois Register* Notice of Proposed Amendments, 34 Ill. Reg. 4281, April 2, 2010 (full text of rule omitted)

C6. Letter from Vicki Thomas of JCAR to Acting Chairman Girard regarding request for analysis of economic and budgetary effects of rulemaking, March 31, 2010

C7. Letter from Director Ribley of the DCEO declining request to undertake economic impact study, April 7, 2010

C8. Prefiled Testimony of Rory Davis of the Illinois EPA, April 15, 2010

C9. Record of Hearing, April 28, 2010 (full transcript omitted)

C10. Illinois EPA's Request for Hearing, May 4, 2010

C11. American Coatings Association's Request for Hearing, May 5, 2010

C12. Prefiled Testimony of the American Coatings Association, May 7, 2010

C13. Prefiled Testimony of Olin Corporation, May 7, 2010

C14. Post-Hearing Comments of the Illinois EPA and Motion to Amend Rulemaking Proposal, May 17, 2010

C15. Record of Hearing, May 19, 2010 (full transcript omitted)

C16. Testimony of David Halcomb, Exhibit No. 3 at May 19, 2010 hearing

C17. Testimony of Rayvac Plastic Decorators, Inc., Exhibit No. 4 at May 19, 2010 hearing

C18. Hearing Officer Order, May 24, 2010

C19. S&C Electric Company's Response to Illinois EPA's Motion to Amend Rulemaking Proposal, June 1, 2010

C20. Post-Hearing Comments of Olin Corporation, June 3, 2010

C21. Post-Hearing Comments of the Illinois EPA, June 4, 2010

C22. Post-Hearing Comments of the American Coatings Association, June 4, 2010

C23. Post-Hearing Comments of the Illinois Environmental Regulatory Group, June 4, 2010

C24. Post-Hearing Comments of Electro-Motive Diesel, June 4, 2010

C25. Order of the Board by A.S. Moore, adopting the rule for second notice review by JCAR, July 15, 2010 (including full text of second notice version of the rule)

C26. Letter from Vicki Thomas of JCAR to Acting Chairman Girard, accepting rulemaking for second notice, July 20, 2010

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026
217/785-4140 PAT QUINN, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR
TDD 217/782-9143

January 12, 2011

Mr. Robert A. Messina
Executive Director
Illinois Environmental Regulatory Group
215 East Adams Street
Springfield, IL 62701

Re: Illinois EPA's Response to U.S. EPA's Waiver of Illinois' NOx RACT Requirement

Dear Mr. Messina:

I understand concerns have been raised by IERG and its membership about upcoming implementation dates for Illinois NOx Reasonably Available Control Technology (RACT) rules, in light of U.S. EPA's proposed waiver of NOx RACT requirements for the 1997 8-hour ozone standard. I intend, through this letter, to provide you with the Illinois EPA's planned response to U.S. EPA's waiver of the NOx RACT requirement once it has been finalized.

As you are aware, on July 29, 2010, the Illinois EPA submitted a NOx RACT waiver request to the U.S. EPA, based on quality assured monitoring data showing attainment of the 1997 8-hour ozone standard in all of Illinois for the period 2007-2009. On December 8, 2010, the U.S. EPA proposed to grant the waiver request in the *Federal Register*. It is my understanding that U.S. EPA intends to finalize the waiver in the near future.

As you are also aware, the Illinois Pollution Control Board (Board) adopted a suite of rules intended to satisfy the NOx RACT requirement for the 1997 8-hour ozone standard in the Chicago and Metro-East 8-hour ozone nonattainment areas. *See* R08-19 and 35 Ill. Adm. Code Part 217, Subparts D, E, F, G, H, I, and M. These rules have a general compliance date of January 1, 2012.

On March 12, 2008, U.S. EPA revised the NAAQS for ozone to an 8-hour average of 0.075 ppm. Based on measured violations of the revised standard, the Illinois EPA recommended to U.S. EPA on March 9, 2009 that both the Chicago and Metro-East areas should be designated as nonattainment areas for which NOx RACT would be required. However, U.S. EPA has not yet acted on implementation of the new standard. Rather, consistent with a directive of the new Obama Administration regarding the review of then pending regulations, U.S. EPA reviewed a number of actions that were taken in the last year of the previous Administration, including the 2008 ozone NAAQS revision. U.S. EPA subsequently proposed to revise the level of the standard to a range of 0.060 to 0.070 ppm. *See* - 75 *Federal Register* 2938, January 19, 2010.

EXHIBIT
2

U.S. EPA announced they were going to finalize the standard by August 31, 2010, which was delayed until October 2010, and then December 2010. Most recently, U.S. EPA announced they expected to finalize the NAAQS revision in the summer of 2011, which will reestablish requirements for NOx RACT to be implemented in areas designated as nonattainment for the revised standard. New nonattainment areas are expected to be designated in 2012, and as a result, Illinois EPA expects that NOx RACT will likely be required by the beginning of the 2015 ozone season.

The Illinois EPA recognizes that the waiver of the NOx RACT requirement to meet the 1997 8-hour ozone standard, the reconsideration of the 2008 8-hour ozone standard, and U.S. EPA's delay in adopting the 8-hour ozone standard revision proposed in 2010 results in a situation where the existing NOx RACT rules, absent an underlying federal requirement to adopt these rules at this time, imposes compliance requirements on the regulated community prior to when they will be necessary under the federal Clean Air Act. In light of that situation, the Illinois EPA intends to pursue the following:

1) To withdraw the pending request currently before the U.S. EPA to approve the Illinois NOx RACT rules as a SIP revision;

2) To file a rulemaking proposal with the Board, as soon as practicable, to extend the compliance date of the Illinois NOx RACT rules to a date of January 1, 2015;

3) To support IERG and its members in a request for relief from the existing NOx RACT compliance obligations that may exist prior to January 1, 2015, consistent with the Agency's upcoming rulemaking to extend the compliance deadline to January 1, 2015, through emergency rulemaking or variance, and;

4) To continue to dialog with IERG, should U.S. EPA's expected promulgation of a new ozone standard in the summer of 2011 necessitate further changes to Illinois' NOx RACT rules.

As you are also aware, U.S. EPA has identified deficiencies in Illinois' NOx RACT rule, as submitted, and will not approve the rules as meeting RACT requirements until the deficiencies have been corrected. The Illinois EPA intends to file a rulemaking proposal with the Board, as soon as practicable, to correct the deficiencies. This proposal will be a separate from and should not affect adoption of the revised compliance date.

I hope this letter clarifies the Illinois EPA's intentions with respect to implementation of the NOx RACT rule. Feel free to contact me if you have any other questions on this matter.

Sincerely,

Laurel L. Kroack
Chief, Bureau of Air

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

EXXONMOBIL OIL CORPORATION Petitioner, v. ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, Respondent.	)	PCB _____ (Variance – Air)

AFFIDAVIT OF MATTHEW J. KOLESAR

I, Matthew J. Kolesar, being first duly sworn on oath, depose and state as follows:

1. I am currently employed as the Safety, Health and Environment Manager for ExxonMobil Oil Corporation ("ExxonMobil") in Joliet, Illinois, a position which I have held since August 2009.

2. I participated in the preparation of the Petition for Variance dated May 17, 2011, to the extent it discusses ExxonMobil.

3. I have read the Petition for Variance dated May 17, 2011, and based upon my personal knowledge and belief, the facts stated therein with regard to ExxonMobil are true and correct.

FURTHER AFFIANT SAYETH NOT.

Matthew J. Kolesar

Subscribed and sworn to before me
this 17th day of May, 2011.

Diane T. Kelly
Notary Public

OFFICIAL SEAL
DIANE T KELLY
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:10/27/12

EXHIBIT
3

CERTIFICATE OF SERVICE

I, Monica T. Rios, the undersigned, hereby certify that I have served the attached ENTRY OF APPEARANCE OF KATHERINE D. HODGE, ENTRY OF APPEARANCE OF MONICA T. RIOS, and PETITION FOR VARIANCE with attached exhibits upon:

Mr. John T. Therriault
Assistant Clerk of the Board
Illinois Pollution Control Board
100 West Randolph Street, Suite 11-500
Chicago, Illinois 60601

via electronic mail on May 18, 2011; and upon:

Division of Legal Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

by depositing said documents in the United States Mail, postage prepaid, in Springfield, Illinois, on May 18, 2011.

By: /s/ Monica T. Rios
Monica T. Rios

Exhibit 2

Air Quality Actions
Update for Subcommittee on Permits/NSR/Toxics

Anna Marie Wood
Washington, D.C.
June 7, 2011

Overview

- NAAQS Update
  - Ozone
  - PM
  - SO_2
  - NO_2
- Transport Rules
- NSR Rule Reconsiderations
- GHG Permitting Update
- Power Plant Mercury and Air Toxics Standards

Current Schedule for Ongoing NAAQS Reviews

MILESTONE	POLLUTANT						
	NO_2 Primary	SO_2 Primary	Ozone Reconsideration	CO	PM	NO_2/SO_2 Secondary	Lead
NPR	Jun 26, 2009	Nov 16, 2009	Jan 6, 2010	Jan 28, 2011	Late 2011	July 12, 2011	Nov 2013
NFR	Jan 22, 2010	Jun 2, 2010	Jul 29, 2011	Aug 12, 2011	TBD	Mar 20, 2012	Sept 2014

NOTE:

Underlined dates indicate court-ordered or settlement agreement deadlines

Next Ozone Review: Proposal in Jun 2013 and Final in Mar 2014

Anticipated NAAQS Implementation Milestones

Pollutant	NAAQS Promulgation Date	Designations Effective	110(a) SIPs due (3 yrs after NAAQS promulgation)	Attainment Demonstration Due	Attainment Date
$PM_{2.5}$ (2006)	Sept 2006	Dec 2009	Sept 2009	Dec 2012	Dec 2014/2019
Pb	Oct 2008	Dec 2010/2011 (extra time for new monitors)	Oct 2011	June 2012/2013	Dec 2015/2016
NO_2 (primary)	Jan 2010	No later than Feb 2012	Jan 2013	Aug 2013	Feb 2017
SO_2 (primary)	June 2010	July 2012	June 2013	Jan 2014	July 2017
Ozone (all dates tentative)	July 2011	No later than Summer 2013	July 2014	No later than Summer 2016	No later than 2019 (moderate)
CO	August 2011	September 2013	August 2014	September 2015	September 2018
$PM_{2.5}$ (current review)	TBD				
NOx/SOx Secondary	Mar 2012	April 2014	Mar 2015	Oct 2015	NA

8-hr Ozone NAAQS Reconsideration

- A final decision in the 2008 reconsideration is scheduled for the end of July 2011
  - CASAC supplemented advice regarding the level of the primary standard as requested
  - Will include final decision on deadline for state designation recommendations
  - Plan to propose Implementation Rule in conjunction with final reconsidered NAAQS
- Designations assistance
  - Guidance memo
  - Source apportionment modeling results
  - Other data relevant to 5-factor analysis

Revisions to Implementation Rule for 1997 8-hr Ozone NAAQS

- RFP credit for emissions reductions outside nonattainment areas
  - Proposed rule December 2010
- Anti-backsliding on 1-hr NAAQS nonattainment NSR major source definitions and offset requirements
  - Proposed rule August 2010
- Classification of former subpart 1 areas under subpart 2
  - Final rule Summer 2011

Draft 2011 Ozone NAAQS Implementation Rule

- Proposed approaches to classifying ozone nonattainment areas
  - Air quality thresholds for Marginal, Moderate, Serious, Severe, and Extreme
  - Impact of options will be illustrated using 2008-2010 air quality data
- Attainment deadlines for each classification
- State Implementation Plan (SIP) schedule and requirements for primary standard nonattainment areas
  - Planning and control requirements currently required for the 1997 NAAQS that must continue to be implemented (i.e., "anti-backsliding" requirements)
- Implementation approach for first-ever separate secondary standard, including classifications and SIP requirements
- Widespread Use of Onboard Refueling Vapor Recovery and Stage II Waiver to be proposed separate from implementation rule
  - Will address waiver of Serious and above area requirements for Stage II vapor recovery systems at gasoline refueling stations
  - Separate guidance memo will address technical aspects of removing existing Stage II from SIPs

$PM_{2.5}$ NAAQS – 2006 Standard

- Nonattainment areas established effective December 2009
  - Attainment demonstration SIPs due December 2012

- Working on guidance memo to clarify several issues (preliminary):
  - RFP policy on crediting reductions from outside the nonattainment area
  - Appropriate base year emissions inventory and RFP milestone year inventory (i.e., 2014 and, where applicable, 2017)
  - Reminder that beginning January 1, 2011, $PM_{2.5}$ attainment planning and control strategies must account for condensable $PM_{2.5}$ emissions.
  - Clarify current requirements for what it means to model attainment "throughout the nonattainment area"
  - Which 3 years of AQ monitoring data EPA anticipates using to determine whether an area attains by its attainment deadline and how to qualify for a 1-year attainment date extension

- PSD Program SIP revisions due May 16, 2011
  - Sunset of 1997 PM_{10} Surrogate Policy

PM NAAQS Policy Assessment Document

- For the $PM_{2.5}$ health standards:
  - Revising the level of the annual health standard within a range of 11 to 13 $\mu g/m^3$
    - Staff concludes evidence most strongly supports range from 11-12 $\mu g/m^3$
  - Retaining the daily standard at 35 $\mu g/m^3$ would be appropriate if the annual standard were set at 11 to 12 $\mu g/m^3$; if annual set at 13 $\mu g/m^3$, consider revising to 30 $\mu g/m^3$
- For the $PM_{2.5}$ welfare standards:
  - Concludes it is appropriate to consider setting a distinct secondary $PM_{2.5}$ standard to address visibility impairment primarily in urban areas
- For the PM_{10} standards:
  - Staff concludes scientific evidence and associated uncertainties could provide support for either retaining or revising the current primary 24-hour PM_{10} standard
    - To the extent consideration is given to revising the standard, staff concludes it would be appropriate to consider a 98th percentile form in conjunction with a level within a range of 85 to 65 $\mu g/m^3$
  - CASAC recommends revising form to a 98th percentile form in conjunction with a level within a range of 75 to 65 $\mu g/m^3$
- If current review results in new/revised standards, revisions to implementation guidance/rule likely to be proposed in conjunction with the final NAAQS

Progress on Ozone and $PM_{2.5}$ Attainment

	8-hr Ozone 2003 designations	1997 $PM_{2.5}$ 2004 designations	2006 $PM_{2.5}$ 2009 designations
Initial Nonattainment Areas	113	39	31
Current Nonattainment Areas	44	39	31
Clean Data Determinations	16	17	1
Redesignations Approved	69	0	0
Pending Redesignations Requests	6	6	1

SO_2 NAAQS Implementation

- SO_2 NAAQS revised June 2010
- SO_2 designations guidance issued March 24, 2011

- EPA anticipates an analytic approach that uses both air quality monitoring and modeling for determining compliance with the new SO_2 NAAQS
  - Consistent with EPA's historic practices for SO_2 NAAQS implementation
  - Single monitor may generally not be adequate to fully characterize ambient SO_2 concentrations around SO_2 stationary sources

- Refined dispersion modeling is able to fully characterize SO_2 air quality impact from modeled sources
  - Overcomes limitations of an approach based solely on monitoring

SO_2 NAAQS Implementation (cont.)

- 110(a)(1) and (2) SIP revisions addressing infrastructure and state-wide "maintenance" due by June 2013
  - Consistent with providing for "implementation, maintenance, and enforcement" of the NAAQS, EPA expects these SIP revisions to demonstrate, through refined modeling, that sources contributing to monitored and modeled violations will be sufficiently controlled to ensure timely attainment and maintenance of the new SO_2 NAAQS
  - "Timely" is expected to mean no later than the attainment date for nonattainment areas (o/a August 2017)
- EPA plans to issue additional SIP guidance after an opportunity for public review and comment
  - This will include additional modeling guidance for SIP attainment demonstrations
- Considering rulemaking to establish:
  - Hybrid modeling/monitoring approach for determining attainment
  - Modeling protocol for attainment demonstrations
  - Attainment deadline for "maintenance track" areas

NO_2 NAAQS Modeling Guidance

- NO_2 NAAQS revised January 2010
- Clarification memo on applicability of Appendix W guidance for new 1-hour NAAQS issued in June 2010
- AERMOD is the preferred model for estimating NO2 impacts in near-field applications (out to 50 km)
  - Alternative models would need approval by EPA pursuant to Appendix W of 40 CFR 51
- Additional guidance issued March 1, 2011
  - Clarifies procedures for analyzing results given probabilistic form of NAAQS
  - Addresses treatment of intermittent emissions (e.g., emergency generators) in PSD modeling demonstrations, a key issue with implementation of the 1-hour NO_2 NAAQS
  - Discussion/recommendations regarding nearby background sources to include in modeling and combining modeled + monitored contributions for cumulative analysis

Pollution Transport Rules

- Transport Rule 1
  - On August 2, 2010 EPA proposed FIPs for 31 states and DC to address the CAIR remand
  - EPA issued three NODAs subsequent to the proposal: January 7, 2011 (allocations methods); Oct 27, 2010 (supplementing the record on emissions inventory data); September 1, 2010 (new version of the IPM model)
  - We anticipate final action by June 2011

- Transport Rule 2
  - Will address, as necessary, the revised 2011 ozone NAAQS
  - Review intended to be national in scope and examine contribution from multiple source categories

NSR RULE RECONSIDERATIONS

$PM_{2.5}$ NSR Rule

Fugitive Emissions Rule

Reasonable Possibility Rule

Aggregation Rule

$PM_{2.5}$ NSR Rule

Petitioners asked EPA to reconsider 4 elements of the final $PM_{2.5}$ NSR Rule:

1. 3-year schedule for SIP revision submittal & policy to continue using PM_{10} surrogate policy in the interim
2. Grandfathering of PM_{10} surrogate policy under Federal PSD program (EPA + delegated states)
3. Transition period for condensable particulate matter (CPM)
4. Interpollutant Trading: Policy allowing precursor offsets for $PM_{2.5}$ emissions increases and EPA-preferred offset ratios for $PM_{2.5}$ precursors

$PM_{2.5}$ NSR Rule

- Reconsideration of PM_{10} Surrogate Policy:
  - On April 24, 2009, EPA issued a letter to the petitioners granting the petition for reconsideration in order to allow public comment on each of the four issues raised in the petition and also stayed the grandfathering provision for 3 months
    - Notice of the stay was published on June 1, 2009
  - On May 10, 2011 EPA issued a final rule to repeal the grandfather provision for $PM_{2.5}$ contained in the federal PSD permit program
- Reconsideration of Condensable PM Waiver
  - Sought comments on shortening the NSR transition period for CPM in the NPRM for PM Test Method Rule
  - Because of delay in issuing final rule for PM Test Methods, EPA has decided not to take any action on shortening the transition period for CPM

$PM_{2.5}$ NSR Rule

- Reconsideration of Interpollutant Trading Policy:
  - EPA agreed to reconsider on grounds that policy did not undergo public review
  - EPA is reviewing the basis for the recommended precursor trading ratios
  - EPA is also taking into consideration the effects of different NAAQs averaging periods (long-term vs short-term) for using ratios
  - Revised policy is expected to be released shortly
  - In the meantime, states may submit SIP revisions allowing for precursor trades along with appropriate offset ratios (including a technical demonstration of the net air quality benefits of such ratios subject to EPA approval)

PM2.5 Grandfathering

- On February 11, 2010, EPA proposed to repeal the grandfathering provision contained in the Federal PSD program
  - This action cites the fact that the technical difficulties which necessitated the 1997 PM_{10} Surrogate Policy have been largely resolved
- Under the PSD programs for $PM_{2.5}$ currently in effect for SIP-approved states, states would be allowed to continue using the PM_{10} surrogate policy until May 2011, or until EPA approves the revised SIP for $PM_{2.5}$, whichever occurs first
- Page memorandum of March 23, 2010 provides recommendations on two aspects of the modeling procedures for demonstrating compliance with the $PM_{2.5}$ NAAQS:
  - Technical issues that must be addressed by any applicant or permitting authority that is seeking to rely on the 1997 PM_{10} surrogate policy
  - Additional information on modeling procedures to demonstrate compliance with $PM_{2.5}$ NAAQS without relying upon the PM_{10} surrogate policy

Fugitive Emissions Rule

- NSR Applicability for fugitive emissions
- Final Rule issued 12/19/08
  - This rule said to count fugitives only for modifications at "list of 28" sources, consistent with approach for counting new source PTE
- Reconsideration and stay granted 4/24/09
- Policy of including fugitives for all modifications is still in place

Reasonable Possibility Rule

- Requires recordkeeping and reporting when the projected increase in emissions to which the "reasonable possibility" test applies equals or exceeds 50 percent of the Clean Air Act's NSR significance levels for any pollutant
- Final 12/21/07
- Granted reconsideration (without stay) on 4/24/09
- Proposal scheduled for September 2011

Aggregation Rule

- September 8, 2006: EPA proposed three changes to the NSR program: Aggregation, Debottlenecking and Project Netting
- Final Rule on Aggregation only: January 15, 2009
  - Combine emissions when projects are "substantially related" either technically or economically
  - Debottlenecking rule withdrawn, no action on project netting
- Reconsideration granted February 2009
- The effective date of the final rule is postponed until no fixed date, as allowed under APA section 705, while litigation is pending

GHG PERMITTING

PSD Permitting Steps under the Tailoring Rule

Once the GHG standard for light duty vehicles took effect (January 2, 2011), GHGs became PSD regulated pollutants, but only from the following sources:

Step 1 January 2, 2011 to June 30, 2011:
Sources/modifications already subject to PSD "anyway"
But only if project would also increase GHG by75,000 tpy CO_2e

Step 2 July 1, 2011 to June 30, 2013:
Continue Step 1 sources/modifications plus *other* large GHG emissions sources/modifications
New source: 100,000 tpy CO_2e PTE
Modification: 100,000 tpy CO_2e PTE and 75,000 tpy CO_2e increase from change

Step 3 Rulemaking to conclude no later than July 1, 2012 (and to take effect one year later)
The permitting threshold in Step 3 could be lower than the permitting threshold in Step 2, but it will be no lower than 50,000 tons CO_2e per year.

EPA Resources to Assist States and Industry

To ensure that GHG permitting runs smoothly for the larger sources that remain covered, EPA has provided the following:

- Guidance on key GHG Permitting topics (BACT, Biomass, etc.)
- White Papers on
  - utilities, refineries, cement, large commercial/industrial/institutional boilers, pulp and paper, iron and steel, and nitric acid plants
- Control Technology Clearinghouses
  - RACT/BACT/LAER
    - GHG Mitigation Strategies
- GHG Permitting Action Team
  - Primary and Secondary Contacts for each EPA Regional Office
  - Bi-weekly meetings for Permit Action Team
  - Weekly internal meetings to address and coordinate issues
- GHG Training for States, Industry and Other Interested Stakeholders
  - www.epa.gov/apti/broadcast2010.html#GHGTraining1210
- Website for GHG permitting resources: www.epa.gov/nsr/ghgpermitting
  - Contains links to White Papers, Clearinghouses, Permitting Action Team, etc.
  - Includes implementation Q&A's (3 posted; more likely)
  - Includes EPA comment letters on proposed permits involving GHG

GHG Permitting Guidance

- Issued November 2010; technical correction March 2011
- Provides statutory and regulatory background for the permitting and regulation of GHGs
- Explains that the PSD and Title V permitting requirements are generally no different for GHGs
- Emphasizes the importance of developing a good record supporting the BACT decision
- Document is guidance, not a rule
  - EPA and delegated permitting authorities should follow guidance when issuing permits
  - SIP-approved permitting authorities have discretion to establish alternative approaches, as long as they comply with CAA and Federal rules
  - Permitting authorities have the discretion to be more stringent than the policies in guidance
- More information available at http://www.epa.gov/NSR/actions.html

Highlights of Greenhouse Gas Permitting Guidance

- Long-standing and familiar permitting requirements and processes apply to GHGs
  - BACT determinations continue to be state- and project-specific decisions
  - GHG BACT is not prescribed for any source type
- In most cases, energy efficiency improvements will satisfy the BACT requirement for GHGs.
- Carbon Capture and Sequestration (CCS) should be considered an available control option for certain types of sources, but required consideration of costs will likely rule CCS out for now.
- Specific types of fuels or facility design neither required nor precluded
  - A BACT analysis for greenhouse gas emissions does not need to consider a fuel switch that would fundamentally redefine the source.

Biomass and GHG Permitting

- Debate about how to account for CO_2 emissions from bioenergy and other biogenic sources from stationary sources
- In Jan 2011, EPA announced an expedited rulemaking to defer completely the application of pre-construction permitting requirements to biomass-fired CO_2 and other biogenic CO_2 emissions for a period of three years
  - Deferral applies to CO_2 emissions only
  - Proposed deferral published March 2011
- EPA will use this time to conduct a detailed examination of the scientific and technical issues associated with biogenic CO_2 emissions and develop an accounting methodology, including a review by an independent panel
- We will use the results of this study to develop a rulemaking on how biogenic CO_2 emissions should be treated and accounted for in PSD and Title V permitting based on the feedback from the scientific and technical review

Interim Guidance – Biomass Permitting

- In March 2011 EPA issued interim guidance to help permitting authorities establish a basis for concluding that BACT for GHG at some sources is the combustion of biomass fuels alone.
  - May be used in permit actions where deferral is not available
  - May be revisited after biomass study is complete

- Provides a rationale to support elimination of GHG control options during the 'Energy, Environmental, and Economic Impacts' portion of the BACT analysis
  - Conclusion to eliminate an option must still be supported in the permit record
  - Applies only to control options being considered for GHG from biomass fuel combustion
    - cannot be used to eliminate control options for GHG emissions from non-combustion processes

Observations Concerning GHG Permits Reviewed by EPA

- Adequate support and explanation of GHG control considerations and decisions
- Inclusion of and adequate support and explanation for form of GHG BACT emissions limit
  - Numerical limit, design standard or some other type of requirement in lieu of numerical limit
- Practical enforceability, compliance monitoring to measure efficiency over time
- Bottom line: documentation of GHG control considerations and BACT limits is very important
- For more information: www.epa.gov/nsr/ghgpermitting

GHG Permitting: The Year Ahead

- Late June 2011 – Final Action on Biomass Deferral from Permitting
- July 1, 2011 – PSD and Title V begin to apply to large GHG sources (≥100,000 tpy CO2e) and modifications (≥75,000 tpy CO2e) that would not previously have been subject to those programs
- January 2012 – Proposed Tailoring Step 3 Rule
- Spring 2012 – Biomass scientific study released
- July 2012 – Final Tailoring Step 3 Rule (one year for states to adopt)
- Late 2012 – If necessary, proposed rule addressing biomass study
- July 2013 – Tailoring Rule Step 3 goes into effect
- Ongoing – Additional Q&A's, guidance as necessary

POWER PLANT MERCURY AND AIR TOXICS STANDARDS

Overview of Rule

- On March 16, EPA proposed Mercury and Air Toxics Standards, the first national standards to reduce emissions of toxic air pollutants from new and existing coal- and oil-fired power plants – often the biggest contributors to air pollution
- Standards would reduce emissions of:
  - Metals, including mercury (Hg), arsenic, chromium, and nickel
  - Acid gases, including hydrogen chloride (HCl) and hydrogen fluoride (HF)
  - Particulate matter
- These pollutants are linked to cancer, IQ loss, heart disease, lung disease and premature death
- Standards create uniform emissions-control requirements based on proven, currently in-use technologies and processes

Public Hearings and Comment

- The public is encouraged to provide EPA with comments on this proposed Toxics Rule
- The agency will seek comments for 60 days following publication in the Federal Register and the proposed rule will be available on the website before publication
- Public Hearings held in May 2011 in Philadelphia, Atlanta, and Chicago
- Public Comment period closes 7/5/11

Exhibit 3

Proposed Rule to Implement 2010 8-Hour Ozone NAAQS

March 2010

Stakeholder Briefing

Purpose Of Briefing

- Get input on a number of implementation issues
- Discuss transition from 1997 ozone NAAQS to any 2010 ozone NAAQS
  - Revocation
  - Subpart 1 vs Subpart 2
- Discuss classification methods for the primary NAAQS
- Outline 2010 8-hr ozone NAAQS implementation rule proposal and discuss other issues

Revocation of 1997 NAAQS

- Court in South Coast ruling upheld revocation of 1-hour standard provided there were adequate anti-backsliding provisions to retain mandatory control obligations.
- One option is to revoke 1997 8-hour standard one year after designations for the 2010 8-hour standard.
  - Require continued implementation of the same anti-backsliding provisions specified in rules governing the transition to the 1997 standard, except modified to account for South Coast ruling.
- Retaining the 1997 standard would require States to plan for attaining two standards simultaneously, including dual transportation conformity demonstrations.

Revocation of 1997 NAAQS (cont.)

- Revocation of 1997 standard and anti-backsliding:
  - Requires continued implementation of the planning and control requirements for the 1997 standard.
  - Note that Clean Data Policy would allow planning requirements to be suspended while area remains clean.
  - EPA would continue to make findings and rulemaking actions on SIP submissions of items required under 1997 NAAQS.
  - Continuing obligations include (for highest applicable classification at the time of 2010 designations):
    - I/M, RFG, Stage II, RACT
    - RFP to attainment date
    - Nonattainment NSR provisions
    - Severe/Extreme area fee program
  - No classification bump-ups or redesignations after effective date of 2010 NAAQS designations.
- Retain 1997 standard:
  - Dual transportation conformity under current rules would be complex for areas with different 1997 and 2010 nonattainment boundaries.

Classification Options Considerations

- A consideration for determining the most appropriate classification method is providing reasonable attainment dates.
- Choice of classification method and resulting classifications will determine the mandatory planning and control requirements that an area must implement.
  - A number of industry and state stakeholders have advocated classification methods that provide higher initial classifications (CA, TX, ExxonMobil, ACC).

Classification Options

- OPTION 1: Modify the CAA's classification table using the same method used to develop 8-hour classification table for 1997 standard--the "Percent-Above-Standard" method.
  - A key rationale in defending the 1997 classification table was that the scheme provided reasonable attainment deadlines based on EPA's future-year modeling projections.
  - Of particular interest is the likelihood that Marginal areas will attain within 3 years

- OPTION 2: Modify the CAA's classification table using a new method—the "Ratio Of Threshold To Range Of Thresholds Method"
  - Places more areas in the higher classifications, which would provide many areas with 3-6 additional years for attainment.
  - Higher classifications involve more mandatory requirements (e.g., I/M, RFG, Stage II vapor recovery, lower RACT & NSR thresholds).

Option 1 – Percent-Above-Standard Classification Method

- Translate classification thresholds from 1-hour DVs (Table 1 of section 181) to 8-hour DVs based on the percentage by which each classification threshold exceeds the 1-hour ozone NAAQS.
- The upper thresholds are precise percentages above the level of the standard, namely 15.0, 33.3, 50.0, 58.3 and 133.3 percent.
- No extreme areas projected.
- Match between projected worst case attainment year and maximum date allowed for marginal areas yields "success rate" of approximately 45% for 0.070 ppm and 30% for 0.065 ppm.

Option 2 - Ratio of Threshold Classification Method

- Establishes extreme classification threshold using highest projected 2010 ozone design value of the data set (0.119 ppm for Los Angeles).
  - This results in one extreme area.
- This method achieves better match between projected worse case attainment year and the maximum date allowed for each classification than the "percent-above-standard" method (i.e., better "success rate")
- Estimate success rate for Marginal areas at approximately 65% for 0.070 ppm and 50% for 0.065 ppm.

Comparison of Classification Thresholds at 0.070 ppm Example NAAQS

Area class	CAA Design Value Thresholds 1-hour ozone (0.120 ppm)	Percent above 1-hour ozone NAAQS	Thresholds for 1997 8-hr O3 NAAQS (0.08 ppm) ("Percent-Above-Std" Method)	OPTION 1 "Percent-Above-Std" Method: Thresholds for a hypothetical 0.070 ppm O3 NAAQS	OPTION 2A "Ratio of Thresholds" Method: Thresholds for a hypothetical 0.070 ppm O3 NAAQS
Marginal	0.121—0.137	NA	0.085—0.091	0.071 to <0.081	0.071 to <0.076
Moderate	0.138—0.159	15	0.092—0.106	0.081 to <0.093	0.076 to <0.083
Serious	0.160—0.179	33.333	0.107—0.119	0.093 to <0.105	0.083 to <0.089
Severe-15	0.180—0.189	50	0.120-0.126	0.105 to <0.111	0.089 to <0.092
Severe-17	0.190—0.279	58.333	0.127—0.186	0.111 to <0.163	0.092 to <0.119
Extreme	0.280 and greater	133.333	0.187 and greater	0.163 and greater	0.119 and greater

Comparison of Classification Thresholds at 0.065 ppm Example NAAQS

Area class	CAA Design Value Thresholds 1-hour ozone (0.120 ppm)	Percent above 1-hour ozone NAAQS	Thresholds for 1997 8-hr O3 NAAQS (0.08 ppm) ("Percent-Above-Std" Method)	OPTION 1 "Percent-Above-Std" Method: Thresholds for a hypothetical 0.065 ppm O3 NAAQS	OPTION 2A "Ratio of Thresholds" Method: Thresholds for a hypothetical 0.065 ppm O3 NAAQS
Marginal	0.121—0.137	NA	0.085—0.091	0.066 to <0.075	0.066 to <0.072
Moderate	0.138—0.159	15	0.092—0.106	0.075 to <0.087	0.072 to <0.079
Serious	0.160—0.179	33.333	0.107—0.119	0.087 to <0.098	0.079 to <0.086
Severe-15	0.180—0.189	50	0.120—0.126	0.098 to <0.103	0.086 to <0.089
Severe-17	0.190—0.279	58.333	0.127—0.186	0.103 to <0.152	0.089 to <0.119
Extreme	0.280 and greater	133.333	0.187 and greater	0.152 and greater	0.119 and greater

Hypothetical Severe & Above Areas
Classification Option 1
("Percent-Above-Standard")
Based on 2006-2008 data

	Extreme				
	Severe-17				
	Severe-15				

Serious & Above Areas added with tighter std--Percent-Above-Standard Classification Method

	0.070 ppm std.		0.065 ppm std.		0.060 ppm std.
Extreme	[none]	Extreme	[none]	Extreme	[none]
Severe	[redacted]	Severe	[redacted]	Severe	[redacted]

Note: Since 2009 ozone levels were very low in the East, there are likely to be fewer Severe areas when actual 2010 design values are used for designations.

Hypothetical Severe & Above Areas
Classification Option 2A -- ("Ratio of Thresholds")

Based on 2006-2008 data

	Extreme
	Severe-17
	Severe-15

Serious & Above Areas added with tighter std--Ratio-Of-Thresholds Classification Method

0.070 ppm std.		0.065 ppm std.		0.060 ppm std.	
Extreme		Extreme		Extreme	
Severe		Severe		Severe	

Note: Since 2009 ozone levels were very low in the East, there are likely to be fewer Severe areas when actual 2010 design values are used for designations.

Modified Version of Option 2 Classification Method

- We have developed a modified version of Option 2 (2B) in which we use lower design values as the threshold for the extreme classification; which in turn results in lowering the thresholds for the other classifications.
  - Depending on how low these extreme thresholds are, the classification method can result in greater percentage of areas projected to attain by their attainment dates.
- An example of Option 2B sets the extreme classification threshold at the second highest ozone design value of the data set.
  - This results in two extreme areas - Los Angeles & Bakersfield.
- Estimate success rate for Marginal areas at approximately 70% for 0.070 ppm and 60% for 0.065 ppm.

Classification Thresholds for each Option at 0.070 ppm Example NAAQS

Area class	OPTION 1 "Percent-Above-Std" Method: Thresholds for a hypothetical 0.070 ppm O3 NAAQS	OPTION 2A "Ratio of Thresholds" Method: Thresholds for a hypothetical 0.070 ppm O3 NAAQS	OPTION 2B "Modified Ratio of Thresholds" Method: Thresholds for a hypothetical 0.070 ppm O3 NAAQS
Marginal	0.071 to <0.081	0.071 to <0.076	0.071 to <0.075
Moderate	0.081 to <0.093	0.076 to <0.083	0.075 to <0.080
Serious	0.093 to <0.105	0.083 to <0.089	0.080 to <0.084
Severe-15	0.105 to <0.111	0.089 to <0.092	0.084 to <0.086
Severe-17	0.111 to <0.163	0.092 to <0.119	0.086 to <0.106
Extreme	0.163 and greater	0.119 and greater	0.106 and greater

Classification Thresholds for each Option at 0.065 ppm Example NAAQS

Area class	OPTION 1 "Percent-Above-Std" Method: Thresholds for a hypothetical 0.070 ppm O3 NAAQS	OPTION 2A "Ratio of Thresholds" Method: Thresholds for a hypothetical 0.065 ppm O3 NAAQS	OPTION 2B "Modified Ratio of Thresholds" Method: Thresholds for a hypothetical 0.065 ppm O3 NAAQS
Marginal	0.066 to <0.075	0.066 to <0.072	0.066 to <0.070
Moderate	0.075 to <0.087	0.072 to <0.079	0.070 to <0.076
Serious	0.087 to <0.098	0.079 to <0.086	0.076 to <0.081
Severe-15	0.098 to <0.103	0.086 to <0.089	0.081 to <0.083
Severe-17	0.103 to <0.152	0.089 to <0.119	0.083 to <0.106
Extreme	0.152 and greater	0.119 and greater	0.106 and greater

Classification Option Comparison - Percent of Areas in Each Class at 0.070 ppm example NAAQS

	Percent-above Standard	Ratio of Threshold (Option 2A - extreme at 0.119 ppm)	Modified Ratio of Threshold (Option 2B - extreme at 0.106 ppm)
Marginal	79	49	42
Moderate	18	37	32
Serious	2	8	13
Severe-15	<1	3	3
Severe-17	<1	2	8
Extreme	0	<1	1

Classification Option Comparison - Percent of Areas in Each Class at 0.065 ppm example NAAQS

	Percent-above Standard	Ratio of Threshold (Option 2A - extreme at 0.119 ppm)	Modified Ratio of Threshold (Option 2B - extreme at 0.106 ppm)
Marginal	62	40	27
Moderate	32	41	40
Serious	4	13	20
Severe-15	1	2	5
Severe-17	1	4	9
Extreme	0	< 1	1

Implementation Governed by Subpart 2 vs. Subpart 1

- Subpart 1 provides fewer mandatory requirements and more flexible attainment dates. However, previous attempts to implement ozone standards under Subpart 1 have been rejected by the court. Subpart 2 is more prescriptive including a graduated system of classification-specific requirements and mandatory 'step-up' procedures for failing to attain.
- In "South Coast" the Court determined that Congress did not mandate that areas with an 8-hour DV of less than 0.09 ppm be classified under subpart 2. Thus, assuming EPA had a reasonable rationale for classifying such areas under subpart 1, it could do so
- For the 2010 primary standard,
  - 2 classifications options based on subpart 2

Secondary NAAQS

- EPA has proposed a cumulative, seasonal secondary ozone standard that would be distinct from the 8-hour primary ozone standard.
- EPA has proposed two alternative schedules for designating nonattainment areas for the secondary NAAQS:
  - the same accelerated schedule as proposed for the primary (July 2011 promulgation date).
  - the maximum 2-year schedule provided under the CAA (August 2012 promulgation date).
- EPA is considering whether subpart 1 or subpart 2 is appropriate for implementation of the secondary NAAQS
  - Decision will determine if these areas must implement subpart 2's mandatory controls.
- If implementation is under subpart 2, EPA will need to propose a separate classification scheme based on the W-126.

Appendix

Topics Discussed in the 2010 Ozone NAAQS Implementation NPRM

Topics Discussed in the 2010 Ozone NAAQS Implementation NPRM

- **Transition to 2010 ozone NAAQS**
- **Classifications**
- **Modeling and attainment demonstration SIPs**
- **Reasonable Further Progress**
  - Baseline year inventory
  - High Electric Demand Days (HEDD)
- **RACT and RACM**
- **Transportation Conformity**
- **General Conformity**
- **NSR**
- **Emission Inventory and Emission Statements**
- **Monitoring**
- **Attainment dates**
- **Timeframe for obtaining emissions reductions to ensure attainment by the attainment date**

Topics Discussed in the 2010 Ozone NAAQS Implementation NPRM (cont.)

- Long-range transport
- Transport of ground-level ozone and its precursors
  - Rural transport nonattainment areas
  - Multi-state nonattainment areas
  - International transport
- Contingency Measures
- Section 182(f) NOx provisions
- Multi-pollutant approaches
- Tribes
- Ozone Transport Regions (OTRs)
- Enforcement and Compliance
- Emergency Episodes
- Clean Data Policy
- Flexible programs
- Section 185 penalty fee program
- SIP Credit for Energy Efficiency/Renewable Energy Programs
- Secondary ozone NAAQS

Exhibit 4

Chicago YE2010 Ozone Design Values

Location	YE2010- Ozone Design Value , ppb
Chicago Area (Lake County)	74
Will County	62

Scenario 1

Classification Thresholds for Option 2A at 0.070 ppm Example NAAQS

Area class	Attainment deadline	OPTION 2A "Ratio of Thresholds" Method: Thresholds for a hypothetical 0.070 ppm O3 NAAQS	Chicago area classification result
Marginal	Designation + 3 years	0.071 to <0.076	Chicago area (74 ppb)
Moderate	Designation + 6 years	0.076 to <0.083	
Serious	Designation + 9 years	0.083 to <0.089	
Severe-15	Designation + 15 years	0.089 to <0.092	
Severe-17	Designation + 17 years	0.092 to <0.119	
Extreme	Designation + 20 years	0.119 and greater	

Scenario 2

Classification Thresholds for Option 2A at 0.065 ppm Example NAAQS

Area class	Attainment deadline	OPTION 2A "Ratio of Thresholds" Method: Thresholds for a hypothetical 0.065 ppm O3 NAAQS	Chicago area classification results
Marginal	Designation + 3 years	0.066 to <0.072	Chicago area (74 ppb) Note 1
Moderate	Designation + 6 years	0.072 to <0.079	Chicago area - Lake County (74 ppb)
Serious	Designation + 9 years	0.079 to <0.086	
Severe-15	Designation + 15 years	0.086 to <0.089	
Severe-17	Designation + 17 years	0.089 to <0.119	
Extreme	Designation + 20 years	0.119 and greater	

Note 1: CAA Section 181(a)(4) allows EPA to adjust the classification for areas within 5% of the threshold level for a classification.

Scenario 3

Classification Thresholds for each Option at 0.070 ppm Example NAAQS

Area class	OPTION 1 "Percent-Above-Std" Method: Thresholds for a hypothetical 0.070 ppm O3 NAAQS	OPTION 2A "Ratio of Thresholds" Method: Thresholds for a hypothetical 0.070 ppm O3 NAAQS	OPTION 2B "Modified Ratio of Thresholds" Method: Thresholds for a hypothetical 0.070 ppm O3 NAAQS
Marginal	0.071 to <0.081 (Chicago-74)	0.071 to <0.076 (Chicago-74)	0.071 to <0.075 (Chicago-74)
Moderate	0.081 to <0.093	0.076 to <0.083(Chicago-74) Note 1	0.075 to <0.080(Chicago-74) Note 1
Serious	0.093 to <0.105	0.083 to <0.089	0.080 to <0.084
Severe-15	0.105 to <0.111	0.089 to <0.092	0.084 to <0.086
Severe-17	0.111 to <0.163	0.092 to <0.119	0.086 to <0.106
Extreme	0.163 and greater	0.119 and greater	0.106 and greater

Note 1: CAA Section 181(a)(4) allows EPA to adjust the classification for areas within 5% of the threshold level for a classification.

Scenario 4

Classification Thresholds for each Option at 0.065 ppm Example NAAQS

Area class	OPTION 1 "Percent-Above-Std" Method: Thresholds for a hypothetical 0.070 ppm O3 NAAQS	OPTION 2A "Ratio of Thresholds" Method: Thresholds for a hypothetical 0.065 ppm O3 NAAQS	OPTION 2B "Modified Ratio of Thresholds" Method: Thresholds for a hypothetical 0.065 ppm O3 NAAQS
Marginal	0.066 to <0.075 (Chicago-74)	0.066 to <0.072 (Chicago-74) Note 1	0.066 to <0.070 (Chicago-74) Note 1
Moderate	0.075 to <0.087	0.072 to <0.079 (Chicago-74)	0.070 to <0.076 (Chicago-74)
Serious	0.087 to <0.098	0.079 to <0.086	0.076 to <0.081
Severe-15	0.098 to <0.103	0.086 to <0.089	0.081 to <0.083
Severe-17	0.103 to <0.152	0.089 to <0.119	0.083 to <0.106
Extreme	0.152 and greater	0.119 and greater	0.106 and greater

Note 1: CAA Section 181(a)(4) allows EPA to adjust the classification for areas within 5% of the threshold level for a classification.