ILLINOIS POLLUTION CONTROL BOARD
December 1, 2011
Corrected

EXXONMOBIL OIL CORPORATION,	)	
	)	
Petitioner,	)	
	)	
v.	)	PCB 11-86
	)	PCB 12-46
ILLINOIS ENVIRONMENTAL	)	(cons.)
PROTECTION AGENCY,	)	(Variance - Air)
	)	
Respondent.	)	

KATHERINE D. HODGE AND MONICA T. RIOS; HODGE DWYER & DRIVER, APPEARED ON BEHALF OF PETITIONER; and

GINA ROCCAFORTE, ASSISTANT COUNSEL, DIVISION OF LEGAL COUNSEL, ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, APPEARED ON BEHALF OF RESPONDENT.

OPINION AND ORDER OF THE BOARD (by C.K. Zalewski):

SUMMARY OF DECISION

This is a case in which there are no facts in dispute. ExxonMobil Oil Corporation (ExxonMobil) seeks a variance from January 1, 2015 until May 19, 2019, from air rules at 35 Ill. Adm. Code 217.Subparts A, D, E, and F. These rules now require ExxonMobil's control of emissions of nitrogen oxide (NO_x)[1] by January 1, 2015. ExxonMobil seeks a variance for its Joliet Refinery (Refinery) adjacent to Interstate 55 at the Arsenal Road exit, approximately 50 miles southwest of Chicago. The refinery is on a 1,300-acre tract of land located in Channahon Township in unincorporated Will County.

ExxonMobil asserts that it would suffer an arbitrary or unreasonable hardship if required to install $28.2 million in equipment for the control of NO_x prior to occurrence of a plant "turnaround" scheduled for Spring 2019; currently this installation is required during the scheduled 2014 turnaround. During turnarounds, the Refinery typically undertakes

[1] NO_x emissions are controlled in part because they are a precursor of ozone formation. Control of NO_x also reduces formation of fine particulate matter (PM), also known as $PM_{2.5}$. The Board has adopted and amended its rules from time to time to assist Illinois' attainment of the National Ambient Air Quality Standards (NAAQSs) for ozone and particulate matter as adopted and amended by the United States Environmental Protection Agency (USEPA) under the Federal Clean Air Act (CAA).

maintenance activities or installation of new equipment or controls. ExxonMobil's Joliet Refinery must plan for turnarounds well in advance to coordinate them with other ExxonMobil facilities in order to make the most efficient and economical use of the Refinery's period of shut down or limited operations. ExxonMobil asserts that required controls should be installed during this planned 2019 outage rather than disrupting Refinery operations and causing the unplanned shut down necessary should the controls have to be installed prior to the Spring 2019 turnaround.

The Illinois Environmental Protection Agency (Agency or IEPA) filed a Recommendation that took a neutral position, advocating neither grant nor denial of the ExxonMobil petition. The Board has carefully reviewed and considered the transcript of the Board's September 19, 2011 public hearing held concerning this request, ExxonMobil's brief, and the three written public comments received (two in opposition and one in favor).

For the reasons set forth in this opinion, the Board finds that to require immediate compliance "would impose an arbitrary or unreasonable hardship" within the meaning of Section 35(a) of the Environmental Protection Act (Act), 415 ILCS 5/35(a) (2010). Additionally, the Board finds that the requested variance may be issued without any significant negative impact on the public or the environment and is consistent with federal law. The Board grants a variance from January 1, 2015 until May 19, 2019, subject to conditions setting interim compliance dates as outlined in the order.

More specifically, the Board finds that ExxonMobil has adequately justified grant of variance, consistent with Board precedent. The Board has considered the demonstrated and acknowledged uncertainty at both state and federal levels of the status and timing of any tightening of the ozone standard, recent compliance deadline extensions through rulemaking for other affected companies, the estimated $28.2 million cost of compliance, economic hardship involved in requiring the Joliet Refinery's shutdown prior to the scheduled Spring 2019 plant "turnaround," the recent 1,300 tons per year (tpy) NO_x emissions ExxonMobil has achieved compared with the 370 tpy of NO_x emissions reductions postponed to 2019, as well as recent improvements in air quality in Will County.

While the Board agrees with the environmental groups that Illinois can adopt certain air pollution requirements more stringent than those required by the federal government, the rulemaking record in Docket R08-19[2] demonstrates that it was the Agency's intention to propose, and the Board's to adopt, ozone control rules required by the federal government. The Board agrees with the environmental groups that the purpose of a variance is to allow time for compliance by a source, and not time for a source to lobby for change of standards. But there is no evidence here that such is ExxonMobil's intention. Based on this record, ExxonMobil has proven that variance is warranted.

In this opinion, the Board first describes the legal framework for variances, followed by the procedural history of this case. The Board then sets forth the regulations from which the

[2] Nitrogen Oxides Emissions From Various Source Categories, Amendments to 35 Ill. Adm. Code Parts 211 and 217, R08-19 (Aug. 20, 2009).

petitioner seeks relief. Next, the Board provides factual background on Exxon's facility and operations. The Board then discusses the requested variance, including the ExxonMobil's proposed compliance plan and conditions, the Agency's recommendation, and ExxonMobil's response to the Agency's recommendation as well as the public comments filed. Lastly, the Board discusses its conclusions of law.

LEGAL FRAMEWORK

A "variance is a temporary exemption from any specified rule, regulation, requirement or order of the Board." *See* 35 Ill. Adm. Code 104.200(a)(1). Under Title IX of the Environmental Protection Act (Act) (415 ILCS 5/35-38 (2010)), the Board is responsible for granting variances when a petitioner demonstrates that immediate compliance with the Board regulation would impose an "arbitrary or unreasonable hardship." *See* 415 ILCS 5/35(b) (2010).

The Board may grant a variance, however, only to the extent consistent with applicable federal law. *See* 415 ILCS 5/35(a) (2010). Further, the Board may issue a variance with or without conditions, and for only up to five years. *See* 415 ILCS 5/36(a) (2010). The Board may extend a variance from year to year if petitioner shows that it has made "satisfactory progress." *See* 415 ILCS 5/36(b) (2010).

Specifically, as it relates to ExxonMobil's request for variance, the Act provides:

> To the extent consistent with applicable provisions of the . . . Clean Air Act as amended in 1977 (P. L. 95-95) and regulations pursuant thereto . . . :
>
> The Board may grant individual variances beyond the limitations prescribed in this Act, whenever it is found, upon presentation of adequate proof, that compliance with any rule or regulation, requirement or order of the Board would impose an arbitrary or unreasonable hardship. However, the Board is not required to find than an arbitrary or unreasonable hardship exists exclusively because the regulatory standard is under review and the costs of compliance are substantial and certain. 415 ILCS 5/35(a) (2010); *see also* 35 Ill. Adm. Code 104.200, 104.208, 104.238.
>
> In granting a variance the Board may impose such conditions as the policies of this Act may require.
> * * *
> [A]ny variance granted pursuant to the provisions of this Section shall be granted for such period of time, not exceeding five years, as shall be specified by the Board at the time of the grant of such variance, and upon the condition that the person who receives such variance shall make such periodic progress reports as the Board shall specify. 415 ILCS 5/36(a), (b) (2010); *see also* 35 Ill. Adm. Code 104.200, 104.242, 104.244.

The Act requires the Agency to provide public notice of a variance petition, including notice by publication in a newspaper of general circulation in the county where petitioner's facility is located. *See* 415 ILCS 5/37(a) (2010); 35 Ill. Adm. Code 104.214. The Board will hold a hearing on the variance petition if 1) petitioner requests a hearing, 2) the Agency or any other person files a written objection to the variance being granted within 21 days after the newspaper notice, or 3) the Board, in its discretion, concludes that a hearing would be advisable. *See* 415 ILCS 5/37(a) (2010); 35 Ill. Adm. Code 104.224, 104.234.

The Act requires the Agency to appear at hearings on variance petitions (415 ILCS 5/4(f) (2010)) and to investigate each variance petition and "make a recommendation to the Board as to the disposition of the petition" (415 ILCS 5/37(a) (2010); 35 Ill. Adm. Code 104.216). The burden of proof is on the petitioner. *See* 415 ILCS 5/37(a) (2010); *see also* 35 Ill. Adm. Code 104.200(a)(1), 104.238(a). In a variance proceeding then, the burden is on the petitioner to prove that immediate compliance with Board regulations would cause an arbitrary or unreasonable hardship that outweighs the public interest in compliance with the regulations. *See* Willowbrook Motel v. PCB, 135 Ill. App. 3d 343, 349-50, 481 N.E.2d 1032, 1036-1037 (1st Dist. 1985).

PROCEDURAL HISTORY

PCB 11-86 Petition

ExxonMobil initiated this proceeding with the filing of a variance petition on May 18, 2011, docketed by the Board as PCB 11-86. The petition sought variance for the Joliet Refinery from the deadline for implementation of the NO_x control requirements of 35 Ill. Adm. Code 217, Subparts A, D, E, F, and Appendix H. The Part 217 rule (sometimes known as the NO_x RACT Rule) was adopted by the Board in 2009 in August 2009 in R08-19. Exxon sought variance for a four year, four month period.

The R08-19 NO_x RACT Rule imposed on the refinery and other sources deadlines for implementation of Reasonably Available Control Technology (RACT) to control emissions of nitrogen oxides. The general compliance deadline was set in R08-19 as January 1, 2012. Certain units listed in Appendix H of the NO_x RACT Rule, including those of ExxonMobil at issue here, were given delayed compliance dates. ExxonMobil's compliance date was December 31, 2014, negotiated to coincide with a 2014 plant turnaround[3]. During turnarounds, the Refinery typically undertakes maintenance activities and/or installation of new equipment or controls. ExxonMobil's Joliet Refinery must plan for turnarounds well in advance and coordinates them with other ExxonMobil facilities in order to make the most efficient and economical use of the Refinery's shut down period and limited operations. As explained later, after the 2014 turnaround, ExxonMobil's next planned turnaround is in 2014 and 2019.

[3] As is common in the petroleum refining industry, ExxonMobil typically schedules turnarounds on a five to six year cycle. ExxonMobil's Response to IEPA Recommendation, Exh. 1 at p. 2, n. 2.

Among ExxonMobil's stated reasons for its requested delay in compliance are the agreed facts that Illinois is currently in compliance with the 1997 ozone standard, that the 2008 ozone standard is presently in abeyance while under litigation, and that the ozone standard proposed by USEPA in January 2010 will not be adopted until July 2014 (rather than in July 2011 as earlier anticipated.) The company estimated that compliance with the existing NO_x RACT rule will cost it an additional $28.2 million in addition to the $1.2 million[4] it has already spent. The company states that it achieved early NO_x emissions reductions of some 1,300 tons per year (tpy) by installation of a selective catalytic reduction (SCR) unit at the refinery's fluid catalytic cracking unit/carbon monoxide (CO) boilers.[5] In contrast, the deferred compliance with the NO_x RACT rule for its boilers and heaters would assertedly result in a 370 tpy reduction.

The Board accepted ExxonMobil's petition in PCB 11-86 for hearing by order of June 2, 2011. ExxonMobil waived hearing on the petition. *See* 35 Ill. Adm. Code 104.204(n) (2010). However, the Board, in its discretion, concluded that a hearing would be advisable. *See* 35 Ill. Adm. Code 104.234(c) (2010). The Board directed that this matter proceed to hearing as expeditiously as practicable.

On July 19, 2011, the Board received a public comment from an environmental organization located in Will County calling itself Citizens Against Ruining the Environment, or CARE (PC1), stating, "that NO_x emissions cause death, respiratory and lung disease, degrades our water quality and effects our environment, humans and animals". PC 1 at 1. Consequently, CARE stated that no industry in Illinois, including ExxonMobil, should be given "variances or extensions" from NO_x RACT Rule compliance deadlines. *Id.*

On August 15, 2011, the hearing officer scheduled a hearing for September 19, 2011 in Bolingbrook, Will County, which was duly noticed by the Board's Clerk.

On August 18, 2011, the Agency filed its Recommendation (Rec.) in PCB 11-86, neither supporting nor objecting to grant the variance. On September 1, 2011, ExxonMobil filed a response to the Recommendation, challenging certain facts and conclusions.

R11-24/R11-26 Rulemaking

On August 18, 2011, the same day the Agency filed its neutral Recommendation in PCB 11-86, the Board entered its final opinion and order in a rulemaking proposed by the Agency April 4, 2011, to extend the R08-19 NO_x RACT Rule general compliance date: Nitrogen Oxides Emissions, Amendments to 35 Ill. Adm. Code 217, R11-24/R11-26 (cons.) (Aug. 18, 2011) (hereinafter R11-24/R11-26). The proceeding was initiated by the IEPA to extend for three years the general compliance deadline of January 1, 2012 set in the R08-19 NO_x RACT Rule to a new compliance deadline of January 1, 2015. The Board accepted the proposal for hearing by

[4] This was updated at the hearing in this proceeding. *See, infra*, p. 19 at n. 13.

[5] *See also infra*, p.20, for ExxonMobil's later clarification at a regulatory hearing that the SCR was installed as required by a federal consent decree with refineries.

order of April 7, 2011, but denied the accompanying Agency request for expedited handling. The Board's order quoted the Agency's statement that expedited rulemaking was necessary because:

> [T]he waiver of the NO_x RACT requirement to meet the 1997 8-hour ozone standard, the reconsideration of the 2008 8-hour standard, and the USEPA's delay in adopting the 8-hour ozone standard revision proposed in 2010 results in a situation where the existing NO_x RACT regulations, absent an underlying federal requirement to implement these rules at this time, impose compliance requirements upon the regulated community prior to when they will be necessary under the CAA. R11-24/R11-26, slip op. at 4 (Apr. 7, 2011).

On April 26, 2011, the Illinois Environmental Regulatory Group (IERG) filed a request for emergency rulemaking, proposing a rule identical to the Agency's R11-24 proposal. On May 19, 2011, the Board denied IERG's request for emergency rulemaking, but consolidated its proposal for expedited hearing with the Agency's R11-24 proposal. R11-24/R11-26 (May 19, 2011). The Board held hearings on June 2 and 28, 2011. ExxonMobil presented extensive testimony at the June 28, 2011 hearing, as well as written comment. (This testimony is detailed in the Board's final opinion in R11-24/R11-26 at 11-18, 25-26.)

As previously stated, ExxonMobil's original compliance deadline was December 31, 2014, based on listing of its sources in Appendix H of the NO_x rule. This date coincides with the planned Winter/Spring 2014 turnaround. In the final rules adopted in R11-24/R11-26, the Board extended the general compliance deadline in the NO_x RACT Rule from January 1, 2012 to January 1, 2015 as requested.[6] But, it also deleted ExxonMobil and another petroleum refinery's sources from the listing in Part 217.Appendix H at Agency request, as these dates occur prior to January 1, 2015. In its opinion and order adopting the R11-24/R11-26 amendments, the Board deferred further site-specific consideration of ExxonMobil's situation to avoid delaying a general extension for other sources of the compliance deadline to January 1, 2015. R11-24/R11-26, slip op. at 32-33. The Board stated that it would consider ExxonMobil's situation in the PCB11-86 proceeding, and noted that the filing of a timely petition for variance from the R11-24 amendments would stay the effect of the rule as to ExxonMobil. *Id.*

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[6] IEPA's Rob Kaleel testified in the R08-19 hearing, in response to questions from ExxonMobil, that the extension of the compliance date from 2012 to 2015 was a "soft date", mutually agreed upon by the Agency and IERG, "given the uncertainty of the ozone date and the need to make this [R08-19] proposal as soon as possible". Pet. Exh. 8, R11-24/R11-26 6/28/11 Tr. at 9. The R11-24 proposal did not address the various aspects of the R08-19 rule rendering it unapprovable, including the fact that the 2012 compliance date was years after USEPA required it. *Id.* at 11-12; *see also* Pet. Exh. 7, in which USEPA articulated its approvability concerns. The Agency did not address this and other USEPA-perceived deficiencies in the R08-19 rule in R11-24. Mr. Kaleel testified that this was because the Agency wanted R11-24 to be "a noncontroversial rule so the companies could receive the relief of the extended compliance date", and also wanted the ozone standard to be finalized so that it would know what the NO_x RACT deadline and requirements would be. *Id.* at 13-14.

PCB11-46/PCB12-46 (cons.)

Petition and Pre-hearing Filings. On September 2, 2011, in PCB 11-86, ExxonMobil filed a document entitled "ExxonMobil's Amended Petition for Variance, or in the Alternative, New Petition for Variance; Motion to Confirm Five-Day Notice for Hearing Pursuant to Section 38(b) of the Illinois Environmental Protection Act". Among other things, ExxonMobil amended its requested variance term, asking that it commence on the Refinery's new R11-24/R11-26 compliance date of January 1, 2015, and expire May 19, 2019.

On September 6, ExxonMobil filed an update on the Ozone Standard. On September 7, 2011, the Agency filed an "Amended Recommendation, or in the Alternative, Recommendation and Response ExxonMobil Oil Corporation's Motion To Confirm Five-Day Notice For Hearing Pursuant To Section 38(b) Of The Illinois Environmental Protection Act". In this filing, the Agency again neither supported nor objected to ExxonMobil's request.

By order of September 8, 2011, the Board accepted ExxonMobil's September 2, 2011 filing as a new petition for variance, docketed as PCB12-46. The Board then consolidated the two variance petitions for hearing. The Board confirmed that because the PCB 12-46 petition was filed within 20 days of the August 22, 2011 filing and effective date of the R11-24/R 11-26 amendments to the Part 217 NO_x RACT Rule that Section 38 (b) of the Act applied. *See* 415 ILCS 5/38(b) providing "the operation of such rule or regulation shall be stayed as to such person pending the disposition of the petition".

The Board's Hearing. Hearing was held September 19, 2011 in Bolingbrook, Will County. ExxonMobil presented witness testimony and eight exhibits[7]. ExxonMobil's employee-witnesses were Robert Elvert, Douglas Deason, Dan Stockl, and Bradford Kolhmeyer.

The Agency did not present witnesses or exhibits in support of its Amended Recommendation. None of ExxonMobil's information was contested by the Agency. However, IEPA's Rob Kaleel spoke in answer to questions posed by Board staff.

Three members of the public presented oral public comment, and asked questions. The material presented by all hearing participants is summarized below:

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[7] The transcript of the September 19, 2011 hearing is cited as "Tr. at __". The exhibits are cited as "Exh. at __". The eight exhibits received at hearing were the prefiled testimony in R11-24-R11/26 of ExxonMobil employees Robert Elvert (Exh. 1), Douglas Deason (Exh. 2), and Dan Stockl (Exh. 3); a September 2, 2011 letter from the Executive Office of President Barack Obama to USEPA Administrator Lisa Jackson re postponement of completion of ozone standard rulemaking (Exh. 4); tables discussing possible scenarios concerning USEPA possible classification thresholds (Exh. 5) and possible ozone standard completion timetables (Exh. 6); a March 29, 2011 letter from USEPA's Cheryl Newton to IEPA's Laurel Kroack re deficiencies in R08-19 rules affecting federal approvability (Exh. 7), and a motion to incorporate transcripts of the June 2, and 28, 2011 hearing testimony in R11-24/R11-26 (Exh. 8). The motion to admit Exhibit 8 was granted by a September 7, 2011 hearing officer order.

Robert Elvert, State Regulatory Advisor for the Midwest Region at ExxonMobil in Channahon, Illinois. Mr. Elvert testified briefly on the issues that ExxonMobil raised in the Rl1-24/R11-26 rulemaking and the variance proceeding - namely, that 1) the NO_x RACT Rule is not currently required or approvable as RACT, 2) ExxonMobil has been discussing these issues with Illinois EPA since the NO_x RACT waiver was proposed, and 3) the Refinery is spending substantial resources on a compliance project for a non-required rule. Tr. at 9-16.

Doug Deason, Environmental Advisor (working since 2007 with USEPA on the still-pending ozone NAAQS draft implementation NO_x RACT Rule). Mr. Deason updated the Board on recent federal activities regarding the ozone standard and the impact of those activities on NO_x RACT requirements and implementation schedule. Mr. Deason explained that the pending ozone standard would be withdrawn, as directed by President Obama, leaving the 2008 ozone standard (75 ppb) in effect. Tr. at 28. USEPA has various options under consideration as to how to classify areas to meet various options under this standard. Exh. 6.

Mr. Deason further explained that, under the 2008 standard, the Chicago area would be in attainment; however, recent recorded exceedances of the 2008 standard could result in the Chicago area being classified as marginal nonattainment. Tr.. at 30-32, and Exh. 6. Mr. Deason also addressed issues regarding implementation of the 2008 standard. He explained the uncertainty regarding the timing of area designations under the 2008 standard since the deadlines for issuing designations have passed. Tr. at 33, and Exh. 7. Mr. Deason concluded that, given the uncertainty regarding implementation of the ozone standards, postponement of the NO_x RACT requirements for the Refinery is warranted at this time. Tr. at 36.

In response to questions, Mr. Deason clarified that RACT is not required for areas classified as "marginal nonattainment" purposes, whereas RACT is required for "moderate and above" areas. *Id.* at 37. Mr. Deason also made clear that USEPA has "departed from" the timelines for various USEPA actions under the Clean Air Act. So, he believes, USEPA would need to "detail and print what they expect the stated to do with respect to fulfilling their obligations to submit State Implementation Plans (SIPs) and to follow through with the planning for the 75-part per billion standard." *Id.* at 38

Dan Stockl, Project Development Group Leader at the ExxonMobil Joliet Refinery. Mr. Dan Stockl updated the Board on the costs associated with the NO_x RACT compliance project at the Refinery. Mr. Stockl explained that ExxonMobil has already spent approximately $1.3 million towards compliance with the initial December 31, 2014 compliance deadline, and ExxonMobil's total cost for the second phase of the project is approximately $28.2 million. *Id.* at 22-23. In addition, Mr. Stockl clarified that, if the NO_x RACT Rule is revised to incorporate USEPA's comments or if a new ozone standard requires additional reductions, the scope of the Refinery's compliance project will change and costs will likely increase. *Id.* at 23-24. (The record also indicates that Matthew Kolesar, Joliet Refinery Safety, Health, and Environment Manager, was present at hearing, although he did not present testimony.) Tr. at 4-5.

Bradford Kohlmeyer, Senior Environmental Advisor. Mr. Bradford Kohlmeyer offered testimony regarding the recent NO_x reductions at the Refinery and the possible impact of the

USEPA comments on the scope of the Refinery's NO_x RACT compliance project. Specifically, Mr. Kohlmeyer testified that the NO_x reductions (1,300 tpy) resulting from the recent installation of a selective catalytic reduction (SCR) unit is well beyond the estimated 370 tpy reduction from boilers and heaters that would result from compliance with the Rule. *Id.* at 42-43. These emission reductions from the SCR were included as part of the alternate control strategy for the NO_x RACT Rule for which ExxonMobil sought IEPA approval as allowed pursuant to Section 217.152(c) of the NO_x RACT Rule. *Id.* Mr. Kohlmeyer also explained that USEPA's comments on the emissions averaging provisions of the Rule could potentially change the scope of the Refinery's NO_x RACT compliance project. *Id.* at 44-46.

Robert Kaleel, Manager of the Air Quality Planning Section of the Agency's Bureau of Air . Mr. Kaleel updated some of the testimony he presented in the Board's R11-24/R11-26 hearings, in response to questions by one of the Board's Environmental Scientists. More specifically, Mr. Kaleel explained that there are data from 2011 showing exceedances of the 75 ppb standard; he would expect that, if that data were used, rather than the 2010 ozone data, the Chicago area would be classified as marginal nonattainment. Tr. at 50-51. He noted, however, that there are monitors in Wisconsin recording higher ozone values that may result in a design value that "might ultimately trigger a moderate classification, but that value wouldn't necessarily dictate the classification value for Chicago." *Id.* at 51. Mr. Kaleel further stated:

> We [at Illinois EPA] are acknowledging the uncertainties, and I think that those have been stated pretty well by Exxon's witnesses. There's just a lot of questions as to schedules, and even the level of the air quality standard, and the amount of reductions that we might ultimately seek. So I think we have the concerns, but we acknowledge the uncertainties. *Id.* at 53.

CARE members Lorna Paisley, Ellen Rendulich, and Mary Paisley. Also present at hearing were four members of the public who asked questions and made oral comments. Three CARE members made oral public comments: Lorna Paisley, Ellen Rendulich, and Mary Paisley. These comments related to the location of the hearing (Bolingbrook rather than Joliet[8]), the location of the nearest Agency air quality monitors (close to the Wisconsin border), and reiteration that no extensions should be given anyone from NO_x compliance deadlines.

At the close of hearing, the hearing officer announced an agreed briefing schedule. ExxonMobil's brief was to be due October 7, 2011, the Agency's on October 17, 2011, and any ExxonMobil reply to the Agency's brief on October 24, 2011. The public comment period deadline was set on October 11, 2011, and the date for close of the record on October 27, 2011.

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[8] As the hearing officer explained at hearing (Tr. at 57), the Board's procedural rules state that "hearings are generally held in the county where the source or facility is located." 35 Ill. Adm. Code 101.600. Hearing officers typically also attempt to secure a no-cost hearing room in the municipality in which a facility is located. The Board regrets the inconvenience to potential hearing participants for the hearing officer's inability to schedule a hearing in Joliet consistent with time deadlines and the Board's fiscal constraints.

Post-hearing Filings. On September 21, 2011, ExxonMobil moved for incorporation of the hearing transcripts from the R11-24/R11-26 hearings on June 2 and 28, 2011. The hearing officer granted the motion in his September 29, 2011 hearing report, noting that the Agency had no objection to the motion, and marked the materials as Exhibit 8.

On October 6, 2011, ExxonMobil timely filed its closing brief. The Agency did not file a brief.

On October 11, 201, IERG filed a 4-page comment (PC 2). In it, IERG encouraged the Board to grant the variance as requested, in light of the regulatory uncertainty concerning the ozone standard and the size of the compliance expenditures necessary.

Also on October 11, 2011, the Board received an 11-page unsigned comment on letterhead from the Environmental Integrity Project (EIP) opposing grant of variance (PC3). EIP states that the comment was submitted on behalf not only of itself, but also the Natural Resources Defense Council, the Respiratory Health Association of Metropolitan Chicago, and CARE. The gist of the comment was that ExxonMobil had failed to prove existence of an arbitrary or unreasonable hardship, and that no variance should be granted to a source seeking variance to avoid, rather than postpone compliance.

On October 24, 2011, ExxonMobil filed a 12-page response to public comment accompanied by a motion for leave to file *instanter*. No response in opposition has been filed, and the Board grants the requested leave and will consider the filing. *See* 35 Ill. Adm. Code 101.500 (d). In its filing, ExxonMobil responded to EIP's various arguments, and asserted that variance was warranted.

The substance of the EIP comment and ExxonMobil's response thereto will be discussed later in this opinion, following discussion of the IEPA Recommendation and Amended Recommendation, and ExxonMobil's response thereto.

REGULATORY BACKGROUND

Illinois Regulations From Which Relief Is Sought

The PCB 11-86 petition sought a four-year and four-month variance from the December 31, 2014 deadline to comply with the applicable requirements of the Board's NO_x RACT Rule, which is set forth at 35 Ill. Adm. Code Part 217. Subparts A, D, E, and F. The PCB 12-46 petition seeks the same four-year and four-month variance, except it seeks relief from the January 1, 2015 compliance deadline revised in R 11-24/R 11-26, which does not include Appendix H compliance dates for ExxonMobil.

Section 217.l50(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 NO_x 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)(l)(A) of this Section that emits NO_x 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 NO_x that potentially could be emitted by a stationary source before add-on controls based on the design capacity or maximum production capacity of the source and 8,760 hours per year or the quantity of NO_x that potentially could be emitted by a stationary source as established in a federally enforceable permit. 35 Ill. Adm. Code 217.l50(a).

The NO_x 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 NO_x 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, 2015.

* * *

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, 2015, 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. Adm. Code § 217.152(a) and (c).

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, 2015 compliance deadline, because it no longer has any emission units listed in Appendix H. ExxonMobil is requesting a four-year and four-month variance running from the January 1, 2015 compliance deadline.

Federal Law Underpinnings of Illinois' NO_x RACT Rule

To understand the premise of ExxonMobil's hardship allegations, some understanding of the federal law underpinnings of the Illinois NO_x RACT Rule is necessary. The Board included a lengthy discussion of these federal underpinnings in its R 11-24/R 11-26 opinions and orders. But, a summary is included below, based on information provided by the Agency in its Recommendation in this docket, as well as the R11-24/11-26 opinion and order.

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

States are primarily responsible for ensuring attainment and maintenance of NAAQS once USEPA has established them. Under Section 110 of the CAA and related provisions, States are to submit for USEPA approval State Implementation Plans (SIPs) that provide for the attainment and maintenance of such standards through control programs directed to sources of the pollutants involved. 42 USC § 7410. Additional requirements include Section 172 of Subpart 1, Nonattainment Areas in General and Section 182 of Subpart 2, Additional Provisions for Ozone Nonattainment Areas under Part D, Plan Requirements for Nonattainment Areas.

Federal statutes implementing Section 107(d)(1)(A) of the CAA provide that:

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

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

1997 Ozone Standard. USEPA revised the level of the 1997 8-hour primary ozone NAAQS in 2008. This revision lowered the ozone standard from 0.08 parts per million (ppm) to 0.075 ppm. The USEPA further revised the 8-hour secondary ozone NAAQS by making it identical to the revised primary standard. 73 *Fed. Reg.* 16436 (March 27, 2008). This revised standard was then challenged by various groups in State of Mississippi, et al. v. EPA, No. 08-1200 (D.C. Cir. 2008).

Based on measured violations of the revised standard during 2006 through 2008, in March, 2009, the Agency recommended to USEPA that portions of the Chicago and Metro-East metropolitan areas be designated as nonattainment for the 2008 revised 8-hour ozone NAAQS. These boundaries were the same as those established pursuant to the 1997 revisions of the ozone NAAQS with the exception of Jersey County.

In September, 2009, the USEPA informed the United States Court of Appeals for the District of Columbia that it would be reconsidering the 2008 8-hour ozone NAAQS. State of Mississippi, et al. v. EPA, No. 08-1200, (D.C. Cir. 2008). In January, 2010, "the USEPA proposed to strengthen the 8-hour primary ozone standard to a lower level within the range of 0.060 to 0.070 ppm to protect public health and the secondary standard within the range of 7 to 15 ppm-hours". 75 *Fed. Reg.* 2938 (Jan. 19, 2010). This reconsideration was intended to ensure that the standards are clearly grounded in science, protect public health with an adequate margin of safety, and protect the environment. These proposed standards were consistent with the recommendations of the Clean Air Scientific Advisory Committee (CASAC). *Id.*

On July 29, 2010, the Agency requested a NO_x RACT waiver from the USEPA for the 1997 8-hour ozone standard for the Illinois ozone nonattainment areas. The request was based upon quality-assured ozone monitoring data for 2007 through 2009, which demonstrate that the 1997 8-hour ozone NAAQS has been attained in the Chicago-Gary-Lake County, IL-IN and St. Louis, MO-IL areas without the implementation of NO_x RACT in the Illinois portions of these areas. The Agency further requested that the USEPA "consider the NO_x RACT amendments that were promulgated by the Board in 2009 [in R08-19] for approval as NO_x RACT in the Illinois SIP under the revised ozone standard that USEPA is currently considering." 75 *Fed. Reg.* 76332 (Dec. 8, 2010). On December 8, 2010, the USEPA proposed to approve the waiver. *Id.* On February 22, 2011, the USEPA approved the Agency's NO_x RACT waiver request for the 1997 8-hour ozone standard for the Illinois ozone nonattainment areas. SR at 5, citing 76 *Fed. Reg.* 9655 (Feb. 22, 2011).

Meanwhile USEPA delayed its final decision on the reconsideration, moving from an initial date of August 31, 2010, to December 31, 2010 and finally to July 29, 2011. *Id.*, citing

State of Mississippi, *et al.*, *supra*. Based on the projected July 29, 2011 USEPA adoption date, IEPA believed that new nonattainment areas would be designated in 2012, and that NO_x RACT would likely be required by the beginning of the 2015 ozone season." *Id.* But, on September 2, 2011, President Obama announced that the pending ozone standard (that was expected to be issued in July 2011) would be reviewed in 2013 and requested that the USEPA Administrator withdraw the draft ozone standard. ExxonMobil's Update on the Status of the Ozone Standard in PCB 11-86, filed September 6, 2011.

ExxonMobil reported in its October 11, 2011 post hearing brief in this matter that, following the Board's September 19, 2011 hearing, USEPA issued a memo providing information to the States regarding the status of the ozone standard and USEPA's next steps. As Exhibit 2 to its brief, ExxonMobil submitted to the Board the Memorandum on the Implementation of the Ozone National Ambient Air Quality Standard (USEPA Sept. 22, 2011) (Memo). The Memo states:

> With the recent decision on the reconsideration of the ozone NAAQS, the current ozone NAAQS is 0.075 ppm .... . . [US]EPA is moving ahead with certain required actions to implement the 2008 standard, but will do so mindful of the President's and Administrator's direction that in these challenging economic times [US]EPA should reduce uncertainty and minimize the regulatory burdens on state and local governments. . . .Brief, Exh. 2, Memo at 1.

As to area designations under the 2008 ozone standard, the Memorandum states that USEPA intends to move forward with designations using the States' 2009 recommendations and updated certified air quality data. Brief, Exh. 2, Memo at 1. USEPA also explains that

> Because we [at USEPA] have states' 2009 recommendations and quality assured ozone data for 2008-2010, there is nothing that state or local agencies need to do until we issue the l20-day letter later this year, though of course, states are welcome to contact us to discuss specific issues at any time. Brief, Exh. 2, Memo at 2.

USEPA plans on initiating a rulemaking to establish nonattainment area classification thresholds. Brief, Exh. 2, Memo at 2. USEPA expects to finalize area designations in mid-2012. *Id.*

ExxonMobil's brief also provided, attached as Exhibit 3, two USEPA- issued guidance tables. Brief, Exh. 3. One of these tables shows an anticipated timeline for a 2014 ozone standard. The other lists USEPA's "initial estimate of areas exceeding the 2008 ozone standard of 0.075 ppm" based on 2008-2010 data. The Chicago area is not included on the table listing areas exceeding the 2008 standard, and thus, based on USEPA's initial review, the Chicago area would be designated in attainment of the 2008 ozone standard based on 2008-2010 data.[9] *Id.*

[9]As testified to at hearing in this docket, monitors in the Chicago area have recorded exceedances in 2011 of the 2008 standard. Tr. at 30-32. Mr. Deason testified that the recent exceedances in 2011 could result in the Chicago area being designated as marginal nonattainment, and RACT is

The second USEPA table provides an estimated timeline for issuance of a 2014 ozone standard. (As mentioned above, President Obama directed USEPA to withdraw the pending 2011 ozone standard proposal and stated that the ozone standard would be evaluated in 2013 in accordance with CAA requirements.) USEPA anticipates that a 2014 ozone standard would be proposed in October 2013 and adopted as a final rule in July 2014.

The Clean Air Act sets up timetables for USEPA and state action following promulgation of a final rule. Final area designations are due within two years after a standard is promulgated, subject to a one year extension deadline. 42 USC §7407(d)(1)B). States are required to submit SIPS within three years after promulgation of a standard, subject to an 18-month extension. Implementation by emission sources of RACT and Reasonably Available Control Measures (RACM) are required as "expeditiously as practicable". 42 USC § 7502(c)(1)(10 and §7511(a)(2). Attainment is due no later than five years from designation, but no more than 10 years from designation under 42 USC §7502(a(2)(A); 42 USC §7511(a) provides attainment is due from 3-29 years from designation depending on classification.

Based on USEPA's July 2014 final rule promulgation schedule, it would appear that the absolute earliest Illinois attainment date possible would be July 2019 without regard to final area designations. Adding in time for final area designations of the statutory 2-3 years would take the attainment date out to 2021-2022.

PM[10]$_{2.5}$ NAAQS

On July 18, 1997, USEPA revised the NAAQS for particulate matter (PM) to add new standards for fine particles, using $PM_{2.5}$ as the indicator. USEPA established primary annual and 24-hour standards for $PM_{2.5.}$ 62 *Fed. Reg.* 38652 (July 18, 1997). In October 2006, USEPA subsequently completed another review of the NAAQS for PM, and as a result, strengthened the 24-hour $PM_{2.5}$ standard from 65 micrograms per cubic meter (µg/m3) of air to 35 µg/m3 of air, but retained the annual PM2.5 standard at 15 µg/m3 of air. 71 *Fed. Reg.* 61144 (Oct. 17, 2006).

At the time of the Board's promulgation of the amendments to Part 217 in R08-19, there were two areas designated as nonattainment for the 1997 annual $PM_{2.5}$ standard: the Chicago-Gary-Lake County, IL-IN designated area and the St. Louis, MO-IL designated area. However, in November 2009, the USEPA determined that the Chicago-Gary-Lake County, IL-IN nonattainment area attained the 1997 $PM_{2.5}$ Standard. 74 *Fed. Reg.* 62243 **(**Nov. 27, 2009).

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not required for marginal areas. *Id.* IEPA's Rob Kaleel testified regarding the same, and acknowledged the uncertainty regarding designation and classification of the area. *Id.* at 49-53. Thus, based on USEPA's initial evaluation, it is possible that the Chicago area will be designated in attainment of the 2008 standard or as a marginal nonattainment area. In either scenario, RACT would not be required.

[10] Particles less than 2.5 micrometers in diameter ($PM_{2.5}$) are referred to as "fine" particles and are believed to pose the greatest health risks because they can lodge deeply into the lungs.

More recently, in May 2011, USEPA determined that the St. Louis, MO-IL nonattainment area has attained[11] such standard. 76 *Fed. Reg.* 29652 (May 23, 2011).

Furthermore, in 2009, several parties challenged the revised PM Standards and the United States Court of Appeals for the District of Columbia Circuit remanded the primary annual $PM_{2.5}$ standard to USEP A for reconsideration. The court stated that USEPA failed to explain adequately why an annual level of 15 µg/m3 of air is "requisite to protect the public health," including the health of vulnerable subpopulations, while providing "an adequate margin of safety." American Farm Bureau Federation v. Environmental Protection Agency, 559 F.3d 512 (D.C. Cir. 2009).

USEPA is presently reviewing the NAAQS for PM, as the USEPA is required to periodically review and revise the NAAQS. Such review focuses on both evidence and risk-based information in evaluating the adequacy of the current PM NAAQS and identifying potential alternative standards for consideration. The USEPA will consider comments received from the CASAC and the public in preparing a final policy assessment.

FACTUAL BACKGROUND

ExxonMobil's Joliet Refinery and Operations

The ExxonMobil Joliet Refinery began operating in 1972. Pet[12]. at 24. It is located 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. *Id.*

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. Pet. at 24.

The Refinery processes crude oil and is capable of processing approximately 248,000 barrels per day. The Refinery produces approximately 10.4 million gallons per day of gasoline, as well as liquefied petroleum gas, propylene, asphalt, sulfur, and petroleum coke. Pet at 24-25.

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[11] IEPA notes in its Recommendation that a finding of attainment is not the same as a formal redesignation to attainment. Redesignation cannot occur unless the State demonstrates to USEPA's satisfaction that the air quality improvements are due to permanent and enforceable control measures. Rec. at 8.

[12]The September 2, 2011 "amended petition" docketed in PCB 12-46 incorporated the petition in PCB 11-86 by reference, and did not repeat much of the material in the original petition.

Affected Emissions Sources, Control Equipment, and Permits

There are twenty process heaters/boilers at the Refinery. Pet at 25. Eight process heaters were formerly listed in Part 217.Appendix H and were subject to the R08-19 December 31, 2014 deadline (extended in R11-24/R11-26 to January 1, 2015). Accordingly, the other twelve were subject to the R08-19 January 1, 2012 deadline (extended in R11-24/R11-26 to January 1, 2015), or December 31, 2014 deadline. *See* Pet. at 25-26 for a table listing all emissions points.

ExxonMobil explains that, for purposes of controlling emissions from fuel combustion emission units, typically low NO_x burners are employed as opposed to add-on controls. In regards to the process heaters/boilers covered by the NO_x RACT Rule, ten of the units are already equipped with "next generation low NO_x burners," designed to achieve a maximum NO_x emission rate of 0.05 lb/mm Btu or less. Additionally, the Refinery has recently installed an SCR at the Refinery's Fluidized Catalytic Cracking Unit/ Carbon Oxide (FCCU/CO) Boilers, which are the single largest source of NO emissions at the Refinery. The SCR is designed to reduce NO_x emissions in excess of what will be achieved by compliance with requirements of the NO_x RACT Rule. Pet at 28. As explained in more detail later, the SCR, installed as a result of a 2005 federal consent decree, became operational in Fall 2010. *See infra*, p. 20.

ExxonMobil states that it operates the Refinery pursuant to a Title V Clean Air Act Permit Program (CAAPP) permit issued by IEPA on August 15, 2000, and revised in December 31, 2002. Petitioner states that a timely renewal application was submitted to IEPA on November 4, 2004 with addenda to the application submitted on July 7, 2007 and February 16, 2011. Since the issuance of the CAAPP permit, ExxonMobil reports that it has also obtained several construction and operating permits for various projects at the Refinery. The company believes its permits will not be affected by this variance request. ExxonMobil states that it will continue to construct and operate any emission units in accordance with the conditions of its CAAPP permit and construction and operating permits. Pet at 26-27.

But, ExxonMobil notes that the NO_x RACT Rule is a State rule in effect for subject sources. Thus, should IEPA act on ExxonMobil's pending CAAPP renewal application, ExxonMobil expects that the NO_x RACT Rule would likely be incorporated into a State only requirements section of a draft CAAPP permit. ExxonMobil also opines that any such incorporation would include a reference to the Board's decision in this matter. Pet. at 27.

Joliet Refinery NO_x Emissions

ExxonMobil reports that IEPA maintains a statewide network of air quality monitoring stations. The ozone and $PM_{2.5}$ monitoring station nearest to the Refinery is located at 36400 S. Essex Road, Braidwood, Will County. Pet at 26, citing IEPA 2009 Annual Air Quality Report at 40 (November 2010) (listing the monitoring stations located in Will County). A second $PM^{2.5}$ monitoring station is located near the Refinery at Midland and Campbell Streets, Joliet, Will County. *Id.*

As reported in the Refinery's 2010 Annual Emissions Report, NO_x emissions from the Refinery totaled 3,077 tpy. Approximately 941 tons were attributable to the eight former

Appendix H emission units, and a total of 1,133 tons were attributable to all emission units subject to the rule combined. Pet. at 27.

NO_x emissions from the FCCU/CO boilers during this same time were 1,497 tons. An SCR, recently installed pursuant to a 2005 federal consent decree, became operational in Fall 2010. Pet. Exh. D, 6/28/11 Tr. at 33-35. A full year projection of NO_x emissions following the installation of the SCR, based on the same operating rates as 2010, will result in approximately 160 tpy of emissions from the FCCU/CO, a reduction in excess of eighty-five percent of NO x emissions from the FCCU/CO, and an over forty percent reduction of NO_x emissions from the entire Refinery. Pet. at 28-29. The approximate NO_x emissions reductions resulting from compliance with the NO_x RACT Rule is about 370tpy. As noted previously, ExxonMobil has submitted a construction permit application to implement a NO_x control strategy that accounts for the emission reductions from the FCCU as compliance with the NO_x RACT Rule requirements. Pet. at 28.

Necessary Compliance Efforts and Petition Basis

In its May 19, 2011 petition, ExxonMobil stated that:

> 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]NO_x RACT] 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 [NO_x RACT] Rule may not be sufficient. Accordingly, efforts to achieve immediate compliance would include spending significant resources to implement NO_x RACT when it is not required and uncertain as to whether it will be in the future. Pet. at 30-31.

At hearing, Mr. Stockl, an employee with 29 years experience at the refinery, testified that compliance efforts begin with analysis of the scope of a rule and evaluation of its impact on the Refinery. Once a rule is finalized compliance options are researched and considered, ranging from operation changes to various capital investment approaches. Tr. at 20. Projects are engineered, and funding is sought from the company. Once funded, detailed design, permitting and construction activities begin. Mr. Stockl stated that the typical timeline for a project of the size and complexity of the refinery's

NO_x RACT project is three and one-half years from the initial formal planning through start-up. *Id.* at 21.

Thus, Mr. Stockl stated, although the January 1, 2012 NO_x RACT Rule has been extended for three years, Exxon began incurring costs to comply with the rule in 2008. Tr. at 22. The Refinery has continued to incur costs, because without a variance the Refinery must comply with the 2015 deadline. Mr. Stockl estimated that "phase one" costs to comply with the 2012 deadline amounted to $2 million in capital costs, and a total cost of $24 million.

In working toward the Part 217.Appendix H December 31, 2014 deadline, Mr. Stockl stated that ExxonMobil has already incurred "phase two" development costs of approximately $700,000 in expense, and $600,000[13] in capital costs to comply with the deadline of December 31, 2014. Additional expenditures of $2.1 million are expected during the latter half of 2011, and $6.5 million in the first half of 2012. Total "phase two" expenditures are expected to be approximately $28.2 million. Total costs for both phases are estimated to be $30.6 million. Tr. at 23.

Mr. Stockl also stated that the scope of the NO_x RACT compliance project could change, if the existing R08-19 NO_x RACT Rule must be amended to meet deficiencies USEPA has identified. Tr. at 23. If requirements are more stringent, he expects that project costs will increase, and some already-made investments rendered obsolete. Accordingly, Mr. Stockl believes that an extension of the 2015 compliance date is necessary in order to "delay ExxonMobil's considerable investments and controls until such time as they are required" by definite changes in the federal ozone standard not expected until 2013 at the earliest.

In this context, ExxonMobil's brief updates this opinion by addressing the USEPA guidance issued after the hearing:

> If the future ozone standard is proposed and final as described in the table, the parties will not know until July 2014 what the final standard will be and whether the Chicago area will be designated as nonattainment of the new ozone standard. Given that air quality continues to improve in the Chicago area, it is possible, depending on the stringency of a future ozone standard, that the area could be designated as attainment or as marginal nonattainment, and NO_x RACT would not be required for either of those designations. Should, however, the Chicago area be designated as moderate nonattainment under a future ozone standard, it is entirely likely that RACT would not be required to be implemented at affected sources until after the May 2019 compliance date requested by ExxonMobil based on the historical timeline, as well as the CAA schedule, for implementation of a federal ozone standard. Brief at 9.

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[13] In response to a query, Mr. Stockl verified that the $600,000 figure was correct, as the company had continued work on the phase two project since he gave a $500,000 figure in testimony at the R11-24/R11-26 hearings. Tr. at 25.

While pursuing its engineering compliance options, ExxonMobil also was involved in efforts with other affected sources to have addressed concerns raised by the USEPA's December 10, 2011 NO_x RACT waiver. These included the fact that the R08-19 rule was not longer required by the CAA, and that its deadlines should be extended until a later date when Illinois and the regulated community "could surmise whether NO_x RACT will even be required, and if it is, what RACT will be." Pet. at 10-11.

ExxonMobil reminds that it was a full participant in the R11-24/R11-26 proceeding beginning in April 2011, noting that the proposed rule did not provide the relief that was necessary for its Appendix H sources. Even before the proceeding concluded, however, ExxonMobil had meetings with IEPA concerning compliance issues. ExxonMobil submitted a construction permit application for a NO_x control strategy involving its FCCU/CO boilers. The company submitted to IEPA a draft of the variance petition, ultimately filed as PCB 11-86 variance petition in May 2011. Pet. at 8-10.

But, it is also important to note that during the R11-24/R11-26 proceeding, ExxonMobil's Mr. Elvert and Mr. Kohlmeyer clarified that the SCR was installed as required by a 2005 consent decree to add controls to the Refinery "well beyond what would be required by RACT." The latter stated that ExxonMobil had submitted a permit application showing "over-compliance" by about 500 tpy. But, the 2005 consent decree by its terms also specifically precluded use of the SCR's reductions in any state program to meet attainment area requirements. For this reason, Mr. Elvert stated that use of the SCR reductions might not be available for use in an alternative compliance strategy under the NO_x RACT Rule. Pet. Exh. 8, R11-24/R11-26 6/28/11 Tr. at 33-35.

The consent decree issue was again specifically addressed by Mr. Kohlmeyer at the hearing in this variance proceeding:

> The [B]oard should also note that the consent decree does not prohibit ExxonMobil from seeking to utilize C[onsent] D[ecree] emission reductions from a covered refinery's compliance with any rules or regulations designed to address regional haze or the non-attainment status of any area.
>
> Since the consent decree clearly anticipated that emission reductions under the consent decree could be used towards compliance with certain rules, such as the NO_x RACT rule, and the rule itself allows for an alternate control strategy reference Section 217.l25C [sic] of the rule, ExxonMobil submitted a construction permit application on May 11th, 2011, requesting an approval of an alternative NO_x control strategy as allowed by Section 217.152C,utilizing the reductions from the SCR to satisfy compliance with the rule. Tr. at 43 (emphasis added.)

THE AGENCY'S RECOMMENDATION AND EXXOBMOBIL'S RESPONSE, AND AGENCY AMENDED RECOMMENDATION

August 18, 2011 Recommendation

The Agency filed its original Recommendation in PCB 11-86 on August 18, 2011. After retracing the recent history of the ozone and particulate matter standards at the state and federal levels up to that date (REC. 1-10), the Agency stated that:

> The Illinois EPA recognizes that the waiver of the NO_x RACT requirement to meet the 1997 Standard, the reconsideration of the 2008 Standard, and the USEPA's delay in adopting the 2010 Proposed Standard results in a situation where the existing NO_x RACT regulations, absent an underlying federal requirement to implement these rules at this time, impose compliance requirements upon the regulated community prior to when they will be necessary under the CAA. Accordingly, in the [then-pending] consolidated rulemakings R 11-24 and R11-26 . . . , the Illinois EPA is proposing to extend that compliance date from January 1, 2012, to January 1, 2015, so as to fulfill the NO_x RACT requirements under the CAA for the 2010 Proposed Standard that the USEPA is currently considering. In addition, a strengthening of the PM standard will also likely yield NO_x RACT (or RACM) requirements upon Illinois for designated nonattainment areas. Rec. at 10-11.

As to environmental impact of the grant of the requested variance, the Recommendation did not contest the information in the petition. But, the Recommendation also stated that

> The injury that the grant of the variance would impose on the public can be measured in terms of the failure of the public to receive the benefit of the [370 tpy of] NO_x emissions reductions as otherwise required by the NO_x RACT Rule until 2019. Rec. at 15.

As to arbitrary or unreasonable hardship, the Recommendations repeated the allegations of the petition. But, the Agency contended without more explanation or further clarification that "[p]etitioner provides no evidence of its inability to comply with Section 217.152 and Appendix H." Rec. at 15. The Agency also commented that "ExxonMobil provides estimates of cost, but offers no calculations or supporting data as to those estimates" allowing substantiation of the cost estimates. *Id.* at 16-17.

Concerning the issue of consistency with federal law, the Recommendation stated that

> Petitioner is correct that there is currently no authority that precludes granting the instant variance request. However, Illinois must still develop plans to attain and maintain the ozone and $PM_{2.5}$ NAAQS. More importantly, Illinois must address its impact on downwind states pursuant to Section 110(a)(2)(D) of the CAA. 42 U.S.C. § 7410. Rec. at 19.

The whole of the Agency's "Recommendation and Conclusion," following citation of the Act's variance burden of proof provisions, was that

> The Illinois EPA bas concerns regarding the Petition, but the Illinois EPA also acknowledges the uncertainty in determining what action will be taken at the federal level and when it will be effective. Therefore, the Illinois EPA neither supports nor objects to the relief being sought by the Petitioner. Rec. at 20.

ExxonMobil's September 1, 2011 Response

ExxonMobil filed a response to the Recommendation to "clarify" some facts and present comments. Resp. at 2. The most relevant of these are summarized here. First, ExxonMobil notes that the parties agreed that the NO_x RACT Rule was not federally required "at this time." *Id.* at 3-4 (emphasis in original).

As to the Agency's environmental impact assessment, ExxonMobil comments:

> Although the 370 tpy reduction of NO_x emissions resulting from compliance with the [NO_x RACT] Rule through installation of controls on process heaters will be temporarily delayed, ExxonMobil is reducing its NO_x emissions well in excess of the 370 tpy by the installation of the SCR. . ., [and] the public is receiving the benefit of the NO_x reductions from the SCR now, *i.e.* the SCR began operating in Fall 2010, rather than beginning in the 2015 ozone season, when the NO_x reductions resulting from compliance with the Rule through installation of controls on process heaters would first be realized. Further, air quality in the Chicago area is improving, as demonstrated by the attainment of the 1997 ozone standard without the implementation of the [NO_x RACT] Rule and the 370 tpy reduction. Thus, although there will be a temporary delay in NO_x emissions reductions from the Rule if the variance is granted, ExxonMobil is already substantially reducing its NO_x emissions beyond the minimum required by the [NO_x RACT] Rule, and there will be little or no impact to human health or the environment. Resp. at 7.

As to the Agency's comment about lack of proof of inability to comply, ExxonMobil stated that

> ExxonMobil has not claimed that it is unable to comply with the [NO_x RACT] Rule, rather ExxonMobil has stated that is arbitrary and unreasonable to do so at this time, and it poses a hardship on the Refinery. Petition at 19-21, 31-32 (stating that it is "an unreasonable hardship to require compliance with the 2014 deadline when ExxonMobil will spend approximately $28 million to implement a [NO_x RACT] Rule that is not necessary and may not be needed by or be sufficient for the 2011 standard).
> Rec. at 6-7.

ExxonMobil's response noted that since the filing of its initial petition, the company had provided sworn testimony concerning its compliance cost estimates and expenditures in the R11-

24/R11-26 hearings on June 2 and 28, and that IEPA had had an opportunity to cross-examine the witnesses. Resp. at 7-8.

Agency's September 7, 2011 Amended Recommendation

The Agency filed its Amended Recommendation (Am. Rec.) in the consolidated PCB 11-86/PCB 12-46 docket on September 7, 2011. The Agency incorporated its original Recommendation by reference, with the only modification being "the underlying Board regulation for which relief is being sought," noting completion of the R11-24/R11-26 rulemaking with the revised compliance deadline of January 1, 2015. Am. Rec. at 2. The Agency concluded by stating that "[a]s set forth in its Recommendation filed on August 18, 2011, the Illinois EPA neither supports nor objects to the relief being sought by the Petitioner." *Id.*

EIP'S PUBLIC COMMENT AND EXXONMOBIL'S RESPONSE

In its public comment, the Environmental Integrity Project (EIP) identifies itself as a Washington, D.C.-based "non-partisan, nonprofit organization dedicated to more effective enforcement of environmental laws and to the prevention of political interference with those laws." PC 3 at 1. EIP states that the comment was submitted on behalf not only of itself, but also the Natural Resources Defense Council, the Respiratory Health Association of Metropolitan Chicago, and CARE (collectively referenced as EIP, consistent with ExxonMobil's responsive filing).

After giving a brief background of the Illinois NO_x RACT Rule and the federal ozone standard, EIP reminds that the state has authority to promulgate rules more stringent than those required by federal law. *Id.* at 2-3. EIP contends that ExxonMobil is requesting a variance for the improper purposes of challenging the validity of a rule and attempting to avoid compliance pending speculative rule change. EIP suggests that the variance should be denied on this ground alone. *Id.* at 4.

EIP further argues that ExxonMobil had failed to demonstrate an arbitrary or unreasonable hardship, asserting that regulatory uncertainty should not be recognized as a hardship. PC 3 at 5. EIP contends that "[t]he purpose of a variance is to provide time for compliance to be achieved — not to ride out regulatory uncertainty." PC 3 at 4.[14]. EIP believes that

[14] EIP's citations do not conform to the Board's usual citation format. Consequently, direct quotations of the citations given by EIP for this proposition are:

> Marathon Oil Company v. IEPA, 1996 WL 271684,*6 (Ill. Pol. Control. Bd. 1996)("The purpose [of a variance] is not to avoid compliance, but rather only to allow for time for compliance to be achieved."); *see also* Monsanto Co. v. IPCB, 10 Ill. Dec. 231, 235 (Ill. 1977)(explaining that "a variance which permanently liberates a polluter of a board regulation is wholly inconsistent with the purpose of the Environmental Protection Act"); City of Mendota v. IPCB, 112 Ill. Dec. 752, 757 (Ill. App. Ct. 1987); City of Dekalb v. IEPA, 1991 WL 155646, 5 (Ill.

> Because the purpose of a variance is not to enable polluters to avoid compliance during regulatory uncertainty, the Board should deny ExxonMobil's petition. Again, regardless of whether an arbitrary or unreasonable hardship exists, a variance should not be granted to ExxonMobil in this case. PC 3 at 5.

EIP contended that ExxonMobil had failed to submit reliable evidence of hardship. EIP reasserts that regulatory uncertainty is not a basis upon which relief can be granted, citing Citizens Utilities Co. of Illinois v. IPCB, 134 Ill.App.3d 111, 115 (3rd Dist.1985) ("If the speculative prospect of future changes in the law were to constitute an arbitrary and unreasonable hardship, the law itself would be emasculated with variances, as there is always the prospect for future change"). PC 3 at 6.

EIP urges that that if ExxonMobil must temporarily shut down the Joliet Refinery to install NO_x controls required by the NO_x RACT Rule, the economic losses ExxonMobil will suffer will be self-imposed. PC 3 at 6[15]. EIP claims that ExxonMobil has failed to make a *prima facie* case, in failing to provide "reliable evidence necessary for a comparison between ExxonMobil's hardship from compliance and the injury to the environment from noncompliance." PC 3 at 7. Noting the portions of the Agency Recommendation in this case concerning the Agency's inability to substantiate compliance cost data, EIP believes that ExxonMobil has failed to satisfy the "arbitrary or unreasonable hardship test" of Section 35 of the Act, particularly since "the Board is not required to find that an arbitrary or unreasonable hardship exists exclusively because the regulatory standard is under review and the costs of compliance are substantial and certain." *Id.* at 7-8, citing 415 ILCS 5/35(a) (2010). EIP believes that, to the extent regulatory uncertainty leads to an inability of ExxonMobil to quantify its costs, such is evidence that this request for variance is not yet ripe. *Id.* at 8.

> Pol. Control Bd. 1991)("A variance is a temporary reprieve from the Board's regulations until compliance is achieved. [Petitioner] is not avoiding compliance and has in fact agreed to make every effort to achieve compliance by the terms of the variance"); Lone Star Indus. v. IEPA, 1992 WL 331228, *2 (Ill. Pol. Control Bd. 1992)("The pendency of rulemaking does not stand by itself as grounds for grant of a variance", citing Citizens Utilities Co. v. IPCB, 479 N.E. 2d 1213). PC 3 at 4-5 (citations repeated as they appear in the original).

[15] In support of this contention, EIP cited

> Marathon Oil Company v. IEPA,1996 WL 271684, *7 (PCB 94-27) ("The Board has articulated that a petitioner's hardship must not be self-imposed by the petitioner's inactivity or decision making."; *see also* Ekco Glaco Corp. v. IEPA, 134 Ill. Dec. 147, 153-154 (Ill. App. Ct. 1989) ("Ekco Glaco's problems [arose] from the delay caused by decisions it has made in attempting to secure compliance and its failure to commit to a particular compliance option.") PC 3 at 6.

EIP charges that ExxonMobil has also failed to provide reliable environmental impact information, again failing to make a *prima facie* case. PC 3 at 8. EIP says citation to Illinois' attainment of the 1997 ozone standard is insufficient, because the Agency Recommendation notes that "a finding of attainment is not the same as a redesignation to attainment. Redesignation cannot occur unless the State demonstrates that the air quality improvements are due to permanent and enforceable control measures." *Id.*

EIP takes the petitioner to task for failing to address "other important environmental impact considerations", such as "the strengthened 2008 federal health-based standard of 0.075 ppm, the CASAC advocated health-based range of 0.060 to 0.070 ppm, and the 2010 proposed federal health-based standard of 0.060 to 0.070 all indicate that the health-based standard is trending." *Id.* Noting ExxonMobil's repeated assertions about regulatory uncertainty, EIP remarks that ExxonMobil

> does not, on the other hand, employ the uncertainty of pending health-based standards in kind; [and] does not consider or analyze the human health and environmental impact of hundreds of tons of additional annual NO_x emissions which would be released into an area which may be designated nonattainment for NO_x under the new standard, and may already carry unhealthy levels of NO_x in its atmosphere toward a more stringent limit. PC3 at 8-9.

EIP alternatively argues that, if the alleged hardships are taken at face value, compliance costs and any other hardship asserted do not outweigh the effect of discharge into the air of 370 tons of NO_x that would otherwise be controlled by 2015. *Id.* at 9. EIP states that that there is a "significant adverse impact on the environment and human health." *Id.* at 10.

EIP believes that petitioner's alleged hardships are not long-term and do not result in extreme detriment to the public as was the case of inadequate wastewater treatment conditions in Sanitary District of Decatur v. IEPA, PCB 09-125 (Jan. 7, 2010). PC 3 at 10. EIP characterizes the asserted hardships as "all hypothetical, vague, or both." *Id.* EIP closes by asserting that

> Petitioner should not be permitted to delay compliance because of cost or inconvenience associated with compliance unless Petitioner clearly demonstrates an arbitrary or unreasonable hardship. Here, Petitioner has not clearly demonstrated an arbitrary or unreasonable hardship. More specifically, ExxonMobil has not demonstrated adequate proof to show that its hardship definitively outweighs the alternative injury that the variance would impose on the public and the environment. Therefore, the Board should deny the requested variance. *Id.*

ExxonMobil's Response

ExxonMobil's response describes the history of the R11-24/R11-26 proceeding, and specifically noted that the Board had deferred consideration of its situation to the variance proceeding. Resp. to PC3 at 1-3. As to asserted hardship, ExxonMobil reiterates that the record shows that the basis for the NO_x RACT Rule is no longer valid, there are substantial costs

associated with compliance at this time, there is minimal, if any impact to the environment if the variance is granted since it is achieving NO_x emissions reductions now that are in excess of reductions from boilers and heaters that would result from compliance with the Rule. *Id.* at 4. Moreover, ExxonMobil asserts that

> potential harm that could occur to the public should the variance not be granted to May 1, 2019, which accounts for the Refinery's turnaround schedule. If ExxonMobil is required to install controls outside of a planned turnaround, there could be serious repercussions in terms of a possible disruption to the fuel supply for the Midwest and increased gasoline prices. Accordingly, ExxonMobil's request for variance from the current January 1**,** 2015 deadline to May 1, 2019 is justified based on the record established in this proceeding and is tailored to minimize disruption to Refinery operations and the resulting impact on the public. Resp. to P.C. 3 at 4-5 (record citations omitted).

ExxonMobil goes on to remark that in its comments, EIP cites several Board and court cases in support of its allegation that ExxonMobil is utilizing the variance to avoid compliance with the NO_x RACT Rule. ExxonMobil comments that, in the cases cited, the Board or court make general statements or cite to other cases describing a variance as a temporary relief mechanism that is intended to allow the petitioner flexibility in the time allowed to achieve compliance, and is not intended to be used to avoid compliance. But, ExxonMobil contends that EIP has "grossly misstated" the Board's conclusion in Lone Star Industries. Inc., PCB 92-134 (May 20, 1993.) (Lone Star). The PC 3 comment states that in Lone Star "the Board found that a variance could not be granted on the possibility of a regulatory change alone." PC 3 at 5. ExxonMobil explains that the cited remark is but one of several general statements made about the nature of variances. ExxonMobil relays that, in its actual Lone Star holding, the Board denied IEPA's Motion to Dismiss and determined that "the information contained in the petition is sufficient and that dismissal of the petition at this point in the proceeding is unwarranted." Lone Star at 3-4. In fact, the Board eventually granted Lone Star's variance request. Lone Star,, slip op. at 12-14 (May 20, 1993). Resp. to PC 3 at 6.

ExxonMobil again points out that it is seeking relief by way of variance, as suggested in the Board's orders in R11-24/R11-26. Resp. to PC 3 at 6. The petitioner further remarks that the evidence it has presented is uncontroverted, and was not challenged by the Agency at hearing when the Agency had the opportunity to do so. Similarly, the Agency did not file a post-hearing brief contesting the evidence presented. *Id.* at 7. ExxonMobil argues that

> In this proceeding, several public comments have been submitted, either orally at hearing or in writing after the hearing. In accordance with the Board's precedent regarding public comments, the public comments, especially the unsigned comment submitted to the Board, should be afforded less weight than the sworn and uncontroverted testimony provided by ExxonMobil. Resp. to PC 3 at 11.

DISCUSSION AND FINDINGS

As previously stated, a petitioner must establish that the hardship resulting from denial of its variance request would "outweigh any injury to the public or the environment" from granting

the relief, and "[o]nly if the hardship outweighs the injury does the evidence rise to the level of an arbitrary or unreasonable hardship." Marathon Oil. Co. v. EPA, 242 Ill. App. 3d 200, 206, 610 N.E. 2d 789, 793 (5th Dist. 1993).

For the reasons stated below, the Board has balanced the hardship that would result from requiring immediate compliance against the impact granting the requested variance would have on the public and the environment. The Board finds that to require immediate compliance "would impose an arbitrary or unreasonable hardship," within the meaning of Section 35(a) of the Act. 415 ILCS 5/35(a) (2010). Additionally, the Board finds that the requested variance may be issued without any significant negative impact on the public or the environment, and is consistent with federal law. The Board grants variance from January 1, 2015 until May 1, 2019.

Weight to be Afforded Various Materials in the Record

The Board begins by discussing the weight to be given to the filings by the parties, persons who made oral comments at hearing, and those who filed written public comments (CARE, IERG, and EIP). As ExxonMobil correctly notes, the Board has consistently held that testimony provided under oath and subject to cross-examination is afforded more weight than public comments. The Board has recently articulated this principle as follows:

> Members of the public are extended some latitude under the Act and Board's rules so that they can express their opinions and beliefs concerning environmental issues without being unduly hampered by procedural barriers. These opinions and beliefs are afforded lesser weight than evidence and statements that are subject to cross-examination. *See* 35 Ill. Adm. Code 101.628(b). . .
>
> Parties in adjudicatory proceedings, particularly in enforcement cases, cannot be afforded the same latitude as members of the public who participate at hearings. Parties and their agents are subject to the rules of discovery, evidence, and administrative procedure as set out in the Board's rules. *See* 35 Ill. Adm. Code 101. Subpart F. . . . post-hearing "comment"—even though accompanied by affidavit—is not subject to cross-examination, and is not an acceptable substitute for hearing testimony. The Board cannot give the full weight of sworn testimony to public comment concerning facts and opinion statements. Illinois v. Community Landfill Co. and City of Morris, PCB No. 03-191, slip op. at 19 (June 18, 2009)(citations to record omitted); *see also* Rochelle Waste Disposal, LLC v. City Council of the City of Rochelle, Illinois, PCB No. 03-218 (Apr. 15, 2004) (stating that "public comments are entitled to less weight than is sworn testimony subject to cross-examination."); Industrial Fuels & Resources/Illinois, Inc. v. City Council a/the City a/Harvey, PCB No. 90-53 (Sept. 27, 1990) (stating that unsworn comments provided at hearing "may be admitted as public comments, and not as testimony, and their probative weight thereby is reduced accordingly.").

In this record, the only party to have presented evidence subject to cross-examination is petitioner. Petitioner's evidence and argument given in this proceeding and in the R11-24/R11-

26 proceeding was not controverted or rebutted by the Agency in sworn testimony at hearing in this case, or addressed in a post-hearing brief. Consequently, the Board must give ExxonMobil's testimony the greatest weight.

The Agency, for its part, articulated general concerns in its Recommendation that neither supported nor objected to grant of variance. But, these concerns were addressed by ExxonMobil in a pre-hearing filing, at hearing, in a post-hearing brief, and in final comments. The Agency did not avail itself of opportunities to further elucidate its concerns or to describe how ExxonMobil's evidence or arguments was lacking. The testimony presented by Agency personnel at hearing related to activities at the federal level, and did not relate to ExxonMobil's situation. The persuasive value of the Agency's "general concerns" is undercut by the Agency's failure to develop or argue its points.

As to EIP's lengthy and thoughtful comment, the Board first observes that the comment was particularly welcome in this case where the only brief before the Board was that of petitioner. But, the comment was not signed, and that reduces the weight it can be given. In its written public comment, EIP echoes and cites some of the general concerns stated in the Agency's Recommendation. The Board can and will give EIP's arguments (and CARE's and IERG's as well) weight to the extent that they are supported by correctly-applied legal argument and precedent. But, the Board cannot give factual assertions made the same weight as sworn witness testimony and exhibits presented by petitioner and subject to cross-examination. Similarly, as to the three CARE members who presented oral public comment at hearing, the Board cannot give full weight to their factual assertions, but fully credits the intensity of their opposition to grant of the requested variance.

Environmental Impact of Grant of Variance

The Board will begin by discussing the environmental impact of the grant of variance, as the only real contention concerning this issue relates to how the impact is characterized. The Board believes that the Agency's Recommendation accurately notes that:

> The injury that the grant of the variance would impose on the public can be measured in terms of the failure of the public to receive the benefit of the NO_x emissions reductions as otherwise required by the NO_x RACT Rule until 2019. Rec. at 15.

The Agency does not challenge the estimated reductions of 370 tpy to be achieved by ExxonMobil's implementation of the NO_x RACT Rule. The Agency does not characterize the extent of this injury as either minimal or severe at any point in this record. EIP, for its part, characterizes this 370 tpy of NO_x emissions as causing a "significant adverse impact on the environment and human health." PC 3 at 10. However, neither the Agency nor EIP addresses ExxonMobil's emissions offset argument.

The record is clear that ExxonMobil has taken other steps to reduce NO_x emission at the Joliet Refinery not currently required by NO_x rules in effect. ExxonMobil has significantly decreased its NO_x emissions through use of an SCR on the FCCU/CO Boilers. This reduction

is substantially larger than the NO_x reduction resulting from compliance with the NO_x RACT Rule. Under the variance, based on 2010 actual emissions, an approximate 370 tpy NO_x 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. The Board recognizes that the SCR was installed as a result of a 2005 consent decree, and SCR reductions may not be used for some purposes, as outlined in the consent decree. But, the reductions attributable to the SCR will have a significant environmental benefit, which the Board believes may be properly considered in the context of this variance (where compliance with the 1997 ozone standard is not at issue).

Further, as previously explained, the primary purpose for Board adoption of the NO_x RACT Rule from which variance is sought was to further Illinois' attainment of the 1997 ozone standard. The record is clear that USEPA has stated that the Chicago area has attained the 1997 ozone standard. The record also indicated that RACT would not be required even if the Chicago area were to be designated as attainment or marginal nonattainment of the 2008 ozone standard. Under these circumstances, the Board finds that deferring reduction of the 370 tpy of NO_x emissions from 2015 to 2019 will not adversely impact air quality in terms of the ozone NAAQS. Thus, for all of the foregoing reasons, the Board finds that the impact of grant of variance on human health and the environment would be minimal.

Consistency with Federal Law

There is no disagreement that a variance could be granted consistent with federal law as there is no currently applicable federal requirement for a NO_x RACT Rule. The Agency requested that the USEPA "consider the NO_x RACT amendments that were promulgated by the Board in 2009 for approval as NO_x RACT in the Illinois SIP under the revised ozone standard that USEPA is currently considering." 75 *Fed. Reg.* 76332 (Dec. 8, 2010). On December 8, 2010, the USEPA proposed to approve the waiver. *Id.* On February 22, 2011, the USEPA approved the Agency's NO_x RACT waiver request for the 1997 8-hour ozone standard for the Illinois ozone nonattainment areas. 76 *Fed. Reg.* 9655 (Feb. 22, 2011).

Arbitrary or Unreasonable Hardshop

Demonstrated Compliance Costs.

In considering a variance request, the Board is required by Section 35(a) of the Act to determine whether the petitioner has presented adequate proof that immediate compliance with the Board's regulations at issue would impose an arbitrary or unreasonable hardship. *See* 415 ILCS 5/35(a) (2010). But, as EIP reminds, Section 35 goes on to provide that "the Board is not required to find that an arbitrary or unreasonable hardship exists exclusively because the regulatory standard is under review and the costs of compliance are substantial and certain." *Id.* However, the Board observes that this is indeed a case where the regulatory standard is under review at the federal level, and the costs of compliance of the Board rule adopted to meet federal compliance are both substantial and certain.

ExxonMobil, as part of its economic hardship case, presented the uncontroverted testimony of Mr. Stockl that ExxonMobil has already spent approximately $1.3 million towards compliance with the initial December 31, 2014 compliance deadline under Part 217.Appendix H, and that ExxonMobil's total cost for the second phase is approximately $28.2 million for costs which includes a turnaround of the Refinery. The Agency's Recommendation, as echoed by EIP, commented that "ExxonMobil provides estimates of cost, but offers no calculations or supporting data as to those estimates" allowing substantiation of the cost estimates. Rec.. at 16-17. Since the Agency failed to probe ExxonMobil's sworn testimony on cross-examination at hearing, or to present testimony challenging its estimates, the Board accepts these cost estimates as true and accurate for purposes of this opinion.

The Agency Recommendation, as again echoed by EIP, also faulted ExxonMobil for presenting "no evidence of its inability to comply with Section 217.152 and Appendix H." Rec. at 15. ExxonMobil aptly stated that it has not argued that it could not comply, arguing instead that immediate compliance would impose an arbitrary or unreasonable hardship. The Board does not concur that, in applying for this variance, ExxonMobil has attempted to evade compliance altogether, as EIP has argued. ExxonMobil has instead offered the argument that compliance should be delayed until the 2019 plant turnaround, to avoid causing it to make over $28.2 million in expenditures during the 2014 turnaround during a period of regulatory uncertainty before the ozone standard is finalized.

"Regulatory Uncertainty."

EIP has argued that prior Board precedent establishes that regulatory uncertainty cannot support grant of variance. This is a generally true proposition. But it is important to note the actual wording in the Lone Star case cited by EIP for this proposition goes on to note that:

> The pendency of a rulemaking does not stand *by itself* as grounds for grant of a variance. (Section 35(a) of the Act; Citizens Utilities Co. of Ill. v. IPCB, [(3rd Dist. 1985), 134 Ill. App. Ed 111, 479 N.E. 2d 1213]; City of Lockport v. IEPA (Sept. 11, 1986), PCB 85-50, 72 PCB 256, 260; General Motors Corp, Electro-Motive Division v. IEPA (Feb. 25, 1988), PCB 83-49, 86 PCB 289,299, Borden Chemicals v. IEPA (Oct. 25, 1990) PCB 90-130, 115 PCB 453.) Lone Star Industries, Inc. v. IEPA, PCB No. 92-134, slip op. at 4 (Oct.19, 1982) (emphasis added) (denying motion to dismiss; variance granted (May 20, 1993).

The uncontested facts as developed in this record present much more than mere "pendency of a rulemaking *by itself.*" The asserted hardship on ExxonMobil to achieve immediate compliance is exacerbated by the unique circumstances in this case. Here, unprecedented uncertainty exists at both the state and federal levels regarding the status and timing of any tightening of the ozone standard. The R08-19 NO_x RACT Rule was, to be sure, adopted by the Board to improve Illinois air quality. But, a major premise of the IEPA proposal, and request for expedited consideration for, the rulemaking was the asserted fact that it was required by USEPA, based on its Finding of [Illinois'] Failure to Submit State Implementation

Plans Required for the 1997 8-Hour Ozone NAAQS, 73 Fed. Reg. 15416-21 (Mar. 24, 2008)[16]. Nitrogen Oxides Emissions From Various Source Categories, Amendments to 35 Ill. Adm. Code Parts 211 and 217, R08-19 (Aug. 20, 2009).

The IEPA testified that the NO_x RACT Rule is currently not required by the CAA. Illinois is in attainment with the 1997 ozone standard, and has also received a NO_x waiver. As previously stated, the ozone standard for 2008 is currently in abeyance due to federal litigation, and final adoption of the ozone standard expected to be issued July 2011 has been delayed by USEPA at White House request until July 2014 at the earliest. This must be followed under the Clean Air Act by USEPA area designations and classifications. It is unclear what the future ozone standard will be, whether RACT will be required under that standard, and if so, when it will be required to be implemented at sources. Based on timetables stated in the CAA and USEPA's July 2014 final rule promulgation schedule, it would appear that the earliest Illinois attainment date possible would be July 2019 without regard to the time it will take USEPA to make final area designations. Adding in time for final area designations of the statutory two-three years would take the attainment date out to 2021-2022. *See supra*, p. 14-15.

This unusual degree of uncertainty was recognized by the Agency in its proposal, and the Board in its adoption, of the R11-24/R11-26 rulemaking to extend the general 2012 deadline of the NO_x RACT Rule adopted in R08-19. The premise of that rulemaking was the common financial hardship to IERG members subject to the NO_x RACT Rule conveyed to the Agency in January 2011. The Agency and IERG negotiated a proposal for a 3-year extension of the general 2012 date until 2015, given uncertainty of the final form of the federal ozone standard, and requested expedited handling of the rule. The Board recognized that asserted common hardship in adopting the rule. Because of the need for speed to avoid delaying relief to other sources, the Board postponed consideration of ExxonMobil's unique hardship until this proceeding. Specifically, the Board stated in its second notice opinion and order in R11-24/R11-26:

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

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[16] Even though a major premise of the R08-19 proposal was that the NO_x RACT Rule was federally required to meet the 1997 ozone standard, the R08-19 rulemaking was not proposed by IEPA as a Section 28.5 CAA fast track rulemaking. This is because the rulemaking was proposed during a brief period of time when Section 28.5 was not in effect. Section 28.5 was added to the Act by P.A. 87-1213, effective September 26, 1992. As amended by P.A. 92-574, effective June 26, 2002, the section expired by its terms on December 31, 2007. The fast track procedure did not exist at the time the R08-19 proceeding was proposed on May 9, 2008. Section 28.5 was restored to the Act, without expiration date, by P.A. 96-308, effective August 11, 2009.

ExxonMobil has commented that it does not wish to delay completion of this rulemaking, noting that sources other than itself need the relief that adoption of the proposal will provide. *See, supra* at 29, quoting PC6 at 1. Accordingly, the Board will not delay completion of rulemaking in this time-sensitive docket longer than may be required by the Act or the APA. While the Board recognizes ExxonMobil's position regarding the proposed compliance date, the Board is also mindful of the numerous other sources which are currently faced with a January 1, 2012 deadline and which require action on this rulemaking proposal as expeditiously as possible. The Board notes the comments of Alton Steel and Midwest Generation as examples of the predicaments currently faced by these other sources. . . .

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

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

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

regulatory or adjudicatory petition. R11-24/R11-26, slip op. at 34-35(Jul. 21, 2011)

In adopting the R11-24/R11-26 general compliance date extension, the Board recognized, without requiring individualized proof, the common financial hardship of all sources subject to the NO_x RACT Rule given regulatory uncertainty. Here, it would be disingenuous at best of the Board to now find that it cannot give persuasive weight to uncontroverted, quantified financial hardship claims made under oath, and subject to cross examination, by ExxonMobil employees in R11-24/R11-26 and reiterated here.

EIP suggests that any economic hardship is self-imposed, citing to Ecko Glaco Corp. v. IEPA, 186 Ill. App. 3d , 542 N.E. 2d 147 (1st Dist.) 1989. However, this case is inapposite here. Unlike in Ecko Glaco, ExxonMobil did *not* delay in committing to a particular compliance option. Rather, once ExxonMobil determined that compliance with the R08-19 NO_x RACT Rule was not required to comply with federal law, ExxonMobil began its own discussions with the Agency. ExxonMobil initiated this variance proceeding, and did not solely rely on the uncertain outcome of the R11-24 rulemaking proceeding initiated by the Agency after discussions with IERG, later proponent of the R11-26 emergency rule proposal. Throughout that rulemaking and in this variance proceeding, ExxonMobil has consistently articulated that it would install the required controls as needed and has stated that it plans to comply with federal and state regulations.

The question then becomes the appropriateness of the proposed delay of installation of the $28.2 million of compliance equipment from the still-planned Spring 2014 plant turnaround until the 2019 plant turnaround. First, it is clear that the ozone rules will not be finalized by the Spring 2014 turnaround, given USEPA's present projection of a July 2014 final rule promulgation (let alone dates of later required area designations). Next, allowing required controls to be installed during a plant turnaround is consistent with IEPA's past practice of accommodating refiners' turnaround schedules, as evidenced in the compliance dates proposed and adopted by the Board in R08-19 in Part 217.Subpart H. Finally, there is no evidence in this record that would cause the Board to discount the asserted administrative intricacies involved in a turnaround, including 1) coordination with other ExxonMobil facilities the most efficient and economical use of the Refinery's shut down period or limited options, 2) planning and designing of an appropriate strategy for installing and implementing necessary controls, 3) ordering the equipment, and 4) constraining or shutting down operations for installation of the control equipment. Given all of these factors, the Board finds that ExxonMobil has met its burden of proving that immediate compliance would impose an arbitrary or unreasonable hardship.

Balance of Factors and Conclusion

Balancing ExxonMobil's demonstrated hardship against the minimal impact to the environment during the term of the requested variance, the Board grants the variance as requested by ExxonMobil from January 1, 2015 to May 1, 2019. The Board finds that ExxonMobil has adequately justified grant of variance, consistent with prior Board precedent.

As hardship, the Board has considered the demonstrated and acknowledged uncertainty at both state and federal levels of the status and timing of any tightening of the ozone standard, recent compliance deadline extensions through rulemaking for other affected companies, the estimated $28.2 million costs of compliance, and economic hardship involved in requiring the Joliet Refinery's shutdown prior to the scheduled Spring 2019 plant turnaround. Against that, the Board has weighed the minimal environmental impact, considering the recent reduction of 1,300 tons per year NO_x emissions at the Refinery compared with the 370 tpy of NO_x emissions reductions deferred until 2019, Illinois attainment of the 1997 ozone standard, and recent improvements in air quality in Will County.

While the Board agrees with the environmental groups that Illinois can adopt certain air pollution control requirements more stringent than those required by the federal government, the R08-19 rulemaking record demonstrates that it was the Agency's intention to propose, and the Board's to adopt, rules required by the federal government. The Board agrees with the environmental groups that the purpose of a variance is to allow time for compliance by a source, and not time for a source to lobby for change of standards. But there is no evidence here that such is ExxonMobil's intention. Based on the unique circumstances of this record, ExxonMobil has proven that variance is warranted.

This opinion constitutes the Board's findings of fact and conclusions of law.

ORDER

The Board grants ExxonMobil a variance for its Joliet Refinery until May 1, 2019 from the January I, 2015 compliance deadline of the NO_x RACT Rule at 35 Ill. Adm. Code 217.Subparts A, D, E, and F.

IT IS SO ORDERED.

Chairman T. A. Holbrook abstained.

If ExxonMobil chooses to accept this variance, it must, within 45 days after the date of this opinion and order, file with the Board and serve on the Agency a certificate of acceptance and agreement to be bound by all the terms and conditions of the granted variance. "A variance and its conditions are not binding upon the petitioner until the executed certificate is filed with the Board and served on the Agency. Failure to timely file the executed certificate with the Board and serve the Agency renders the variance void." 35 Ill. Adm. Code 104.240. The form of the certificate follows:

CERTIFICATE OF ACCEPTANCE

I , _____, having read the opinion and order of the Illinois Pollution Control Board in docket PCB 11/86/PCB 12-46 (cons.) dated December 1, 2011, understand and accept the opinion and order, realizing that this acceptance renders all terms and conditions of the variance set forth in that order binding and enforceable.

Petitioner ExxonMobil Oil Corporation

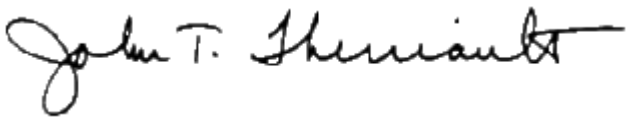
By: _____
Authorized Agent

Title: _____

Date: **_____**

Section 41(a) of the Environmental Protection Act provides that final Board orders may be appealed directly to the Illinois Appellate Court within 35 days after the Board serves the order. 415 ILCS 5/41(a) (2008); *see also* 35 Ill. Adm. Code 101.300(d)(2), 101.906, 102.706. Illinois Supreme Court Rule 335 establishes filing requirements that apply when the Illinois Appellate Court, by statute, directly reviews administrative orders. 172 Ill. 2d R. 335. The Board's procedural rules provide that motions for the Board to reconsider or modify its final orders may be filed with the Board within 35 days after the order is received. 35 Ill. Adm. Code 101.520; *see also* 35 Ill. Adm. Code 101.902, 102.700, 102.702.

I, John Therriault, Assistant Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on December 1, 2011, by a vote of 4-0.



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John Therriault, Assistant Clerk
Illinois Pollution Control Board