

KATHERINE D. HODGE E-mail: khodge@hdzlaw.com

January 20, 2009

#### **VIA FEDERAL EXPRESS**

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

Timothy Fox, Esq. Hearing Officer Illinois Pollution Control Board 100 West Randolph Street, Suite 11-500 Chicago, Illinois 60601

RE: Application for Non-Disclosable Information

In the Matter of: Nitrogen Oxides Emission from Various Source

Categories: Amendments to 35 Ill. Adm. Code Parts 211 and 217, R08-19

Dear Sirs:

In connection with the above-referenced rulemaking, ConocoPhillips Company ("ConocoPhillips") is submitting the attached Supporting Materials to the Illinois Pollution Control Board ("Board"). Attachments B and C of the Supporting Materials are being submitted as NON-DISCLOSABLE INFORMATION to the Board pursuant to 35 Ill. Adm. Code Part 130. "Non-disclosable information" is defined in part as "information concerning secret manufacturing processes or confidential data submitted by any person under the [Illinois Environmental Protection] Act." 35 Ill. Admin. Code § 101.202 (citing 415 ILCS 5/7(a)). Attachments B and C are documents containing confidential data and information regarding cost evaluations of projects at ConocoPhillips' facility, as well as a turnaround schedule for maintaining and/or upgrading process heaters at the facility.

To facilitate the Board's protection of Attachments B and C as non-disclosable information, we are providing the information required by Section 130.404 of the Board's rules. The information in Attachments B and C is business confidential data and is not available publicly outside ConocoPhillips and is restricted information within ConocoPhillips.

Mr. John T. Therriault Timothy Fox, Esq. January 20, 2009 Page 2

Accordingly, access to the information included in Attachment B is limited to only management level employees and project engineers that are required to use the information during the course of their job duties. Similarly, access to information included in Attachment C is limited to only management level employees and other employees that are required to use the information during the course of their job duties for business planning purposes. Information provided in Attachment B has competitive value based on negotiated price of the equipment that will be installed, and the information in Attachment C is vital to strategically planning future operations in accordance with the company's business plan. Thus, confidential information in Attachments B and C is considered sensitive in a competitive market and disclosure of such information would provide an advantage to competitors in terms of negotiation of project costs and knowledge of when the facility will not be operating all of its units. ConocoPhillips treats the information in Attachments B and C as business confidential and proprietary and has no knowledge that the information has been published or disseminated beyond the company, except to outside counsel who are obligated to treat the information as protected.

As required by the Board's rules, Attachments B and C have been labeled as NON-DISCLOSABLE INFORMATION. In addition, in accordance with Section 130.404(e)(4), we have enclosed the affidavit of Mr. David Dunn verifying the facts set forth above. This letter constitutes an unlimited waiver of any statutory determination process.

If you have any questions regarding the above, please do not hesitate to contact me.

Sincerely,

Katherine D. Hodge

KDH:MTR:db enclosures

CNPH:011/Fil/R08-19/Application for Non-Discl. Info.

STATE OF ILLINOIS	)
	) SS
COUNTY OF MADISON	)

# AFFIDAVIT OF DAVID W. DUNN

I, David W. Dunn, on behalf of CONOCOPHILLIPS COMPANY ("ConocoPhillips"), being first duly sworn, depose and state as follows:

- 1. I am the Environmental Director of ConocoPhillips' Wood River Refinery.
- I have reviewed the application for non-disclosable information dated January 20,
   2008 and the Supporting Materials to be filed with the Illinois Pollution Control Board in the
   R08-19 rulemaking.
- 3. The information contained in Attachments B and C of the Supporting Materials is not available publicly outside ConocoPhillips and is restricted information within ConocoPhillips.
  - a. Access to the information included in Attachment B is limited to only management level employees and project engineers that are required to use the information during the course of their job duties.
  - b. Access to the information included in Attachment C is limited to only management level employees and other employees that are required to use the information during the course of their job duties or for business planning purposes.
- 4. The information provided in Attachment B has competitive value based on the negotiated price of the equipment that will be installed at the facility. The information in Attachment C is vital to planning future operations in accordance with the company's business plan.

- 5. The information in Attachments B and C is considered sensitive in a competitive market and disclosure of such information could provide an advantage to competitors in terms of negotiation of project costs and knowledge of when the facility will not be operating all of its units.
- 6. ConocoPhillips treats the information in Attachments B and C as business confidential and proprietary. I have no knowledge that the information has been published or disseminated beyond the company, except to outside counsel.

Under penalties as provided by law pursuant to Section 1-109 of the Code of Civil Procedure, the undersigned certifies that the statements set forth in this instrument are true and correct, except as to matters therein stated to be on information and belief and as to such matters the undersigned certifies as aforesaid that he verily believes the same to be true.

Further Affiant Sayeth Not.

David W. Dunn

Subscribed and sworn to before me this <u>40</u> day of <u>January</u> 2009.

Notary Public

OFFICIAL SEAL
CAROL HALLOWS
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES:04/27/12

CNPH:011/Fil/R08-19/Affidavit of D. Dunn

# BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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

# **NOTICE OF FILING**

TO:	Mr. John T. Therriault	Timothy Fox, Esq.
	Assistant Clerk of the Board	Hearing Officer
•	Illinois Pollution Control Board	Illinois Pollution Control Board
	100 W. Randolph Street	100 W. Randolph Street
	Suite 11-500	Suite 11-500
	Chicago, Illinois 60601	Chicago, Illinois 60601
	(VIA ELECTRONIC MAIL)	(VIA FIRST CLASS MAIL)

# (SEE PERSONS ON ATTACHED SERVICE LIST)

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board the **SUPPORTING MATERIALS FROM CONOCOPHILLIPS COMPANY**, a copy of which is herewith served upon you.

Respectfully submitted,

By: /s/ Katherine D. Hodge
Katherine D. Hodge

Dated: January 20, 2009

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

# **CERTIFICATE OF SERVICE**

I, Katherine D. Hodge, the undersigned, hereby certify that I have served the attached SUPPORTING MATERIALS FROM CONOCOPHILLIPS COMPANY upon:

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

via electronic mail on January 20, 2009; and upon:

Timothy Fox, Esq. Ma
Hearing Officer Ch
Illinois Pollution Control Board Of
100 West Randolph, Suite 11-500 69
Chicago, Illinois 60601 Ch

Gina Roccaforte, Esq.
John J. Kim, Esq.
Division of Legal Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

Virginia Yang, Esq.
Deputy Legal Counsel
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, Illinois 62702-1271

Matthew J. Dunn, Esq. Chief, Environmental Bureau North Office of the Attorney General 69 West Washington Street, Suite 1800 Chicago, Illinois 60602

Kathleen C. Bassi, Esq. Stephen J. Bonebrake, Esq. Schiff Hardin, LLP 6600 Sears Tower 233 South Wacker Drive Chicago, Illinois 60606-6473

Christina L. Archer, Esq. Associate General Counsel Arcelormittal USA, Inc. 1 South Dearborn, 19th Floor Chicago, Illinois 60603

by depositing said document in the United States Mail, postage prepaid, in

Springfield, Illinois on January 20, 2009.

/s/ Katherine D. Hodge
Katherine D. Hodge

CNPH:011/Fil/R08-19/NOF-COS - Supporting Materials

Electronic Filing - Received,	Clerk's Office,	January 20, 2009
	* * * * * PC #	<i>‡</i> 5 * * * * *

# BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

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

# SUPPORTING MATERIALS FROM CONOCOPHILLIPS COMPANY

NOW COMES CONOCOPHILLIPS COMPANY ("ConocoPhillips"), by and through its attorneys, HODGE DWYER ZEMAN, and submits the attached SUPPORTING MATERIALS in the above-referenced matter.

- 1. On December 9, 2008, Mr. David W. Dunn on behalf of ConocoPhillips presented testimony in the above-referenced matter. During the course of his testimony, the Illinois Environmental Protection Agency ("Agency") or the Illinois Pollution Control Board ("Board") requested additional documents or information in response to testimony that Mr. Dunn provided.
- 2. As stated at hearing and in the cover letter to this filing, two of the enclosed Attachments are being submitted to the Board as NON-DISCLOSABLE INFORMATION pursuant to 35 Ill. Admin. Code Part 130.
- 3. The following materials are being provided in response to Agency or Board requests at hearing:
  - a. On pages 151 and 154 of the December 9, 2008 transcript, the Agency requested cost analysis information for the boiler and process heater examples referenced in Mr. Dunn's pre-filed testimony. As Mr. Dunn stated at hearing, such information was provided to the Agency in January 2008 as confidential business information. ConocoPhillips has provided, as Attachment A, a

January 8, 2008 letter to the Agency regarding comments on the R08-19 rulemaking proposal. In addition, ConocoPhillips has provided, pursuant to 35 Ill. Admin. Code Part 130, its cost analysis data as NON-DISCLOSABLE INFORMATION, which is attached hereto as Attachment B.

- b. On pages 156 through 157 of the December 9, 2008 transcript, the Board requested that the turnaround schedule for process heaters be provided, if possible. As noted at hearing, the turnaround schedule is confidential for business purposes. Accordingly, ConocoPhillips is submitting a turnaround schedule for affected heaters at its facility as NON-DISCLOSABLE INFORMATION pursuant to 35 Ill Admin. Code Part 130. The confidential turnaround schedule is attached hereto as Attachment C.
- c. On page 153 of the December 9, 2008 transcript, the Agency inquired as to the age of the burners and burner management system for the boiler referenced on page 7 of Mr. Dunn's testimony. Information regarding the age of the burners and burner management system for Boiler 15, as well as information regarding the actual emissions rate and factor for the examples discussed in Mr. Dunn's testimony, is attached hereto as Attachment D.
- 4. As provided in the cover letter to this filing, ConocoPhillips has submitted
  Attachments B and C as NON-DISCLOSABLE INFORMATION pursuant to 35 Ill. Admin.
  Code Part 130 and requests that such Attachments be handled by the Board in accordance with
  35 Ill. Admin. Code Part 130.

5. ConocoPhillips reserves the right to supplement these supporting materials.

Respectfully submitted,

By: /s/ Katherine D. Hodge
Katherine D. Hodge

Dated: January 20, 2009

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

CNPH:011/Fil/R09-19/Supporting Materials



Wood River Refinery P. O. Box 76 900 South Central Avenue Roxana, Illinois 62084

January 8, 2008

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT REQUESTED</u>

Mr. Rob Kaleel
Manager, Air Quality Planning Section
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 1276
Springfield, IL 62794-9276

Re:

**Draft Regulatory Proposal** 

NOx rule posted on July 30, 2007; revised December 19, 2007

Dear Mr. Kaleel:

Enclosed for your consideration are comments prepared by ConocoPhillips on behalf of the WRB Refining LLC refinery in Roxana, Illinois regarding the Illinois EPA's draft NOx rulemaking (December 19, 2007 version).

The Wood River Refinery (WRR) has operated in Illinois since 1917. It refines more than 300,000 barrels of crude oil per day and currently employs more than 600 employees and a large number of contractors. WRR is located in Madison County, which is included in the St. Louis ozone moderate nonattainment area.

WRB Refining LLC is a joint venture between ConocoPhillips and Encana that was created on January 1, 2007. ConocoPhillips is the operator of the WRR facility for the joint venture. ConocoPhillips is a member of the Illinois Environmental Regulatory Group.

The comments described below reflect a careful consideration of the draft regulatory proposal and a comparison against ongoing projects to reduce NOx in the refinery. The regulatory proposal as drafted could significantly affect WRR operations by requiring overly stringent and unreasonable NOx controls to be installed on many boiler and heaters. The compliance date included in the draft is not achievable, based on the remaining time to design, plan, purchase, install the controls, and complete performance testing on a large number of emission sources. Installation of the controls included in the proposed draft will require entire processing units to be shut down for several weeks. Very few of the affected units are currently scheduled for maintenance turnarounds before the compliance deadline and, therefore, any unscheduled refinery unit shutdowns will have a significant effect on the fuel supply in the Midwest market.

WRR supports the comments that IERG filed on October 15, 2007 and subsequent IERG comments and offers the following specific comments on the impacts this regulatory proposal could have on WRR.

Mr. Rob Kaleel January 8, 2008

For background purposes, WRR notes that the refinery is subject to a 2005 Clean Air Act enforcement consent decree (the Consent Decree) between ConocoPhillips, WRB, the United States and the State of Illinois. This Decree includes significant requirements to reduce NOx emissions from existing heaters and boilers throughout COPC's U.S refineries, including those in Illinois. Many of the comments provided herein are based on the experience we have gained in implementing those Consent Decree provisions.

#### Compliance date deadline

Proposed Section 217.152 includes a compliance date of May 1, 2010 for the installation of controls and demonstration of compliance for all affected facilities. This date is not achievable given the design, engineering, purchasing, and construction challenges that would be required to meet the very stringent emission limits noted in the draft proposal. There are several reasons why this date is not achievable.

- a. As of the filing of these comments, only 28 months remain before compliance must be certified. The regulation has not been finalized and the parties subject to the regulation are not certain with what they must comply. WRR has not prepared a detailed compliance plan at this time, since it is unclear what we must include in the plan.
- b. Every heater and boiler that is included in the as-yet-to-be-determined plan must be carefully evaluated to determine the most efficient compliance plan. This evaluation must include assessments of existing controls, potential future controls, potential future process changes and economic considerations before the plan can be finalized. The averaging plan included in the draft proposal must be evaluated to determine if certain equipment can be over-controlled to balance out under-controlled equipment. Development of the initial compliance plan is expected to take WRR at least 6 months, and will probably remain open to modification several months after that while more detailed engineering studies are completed on the affected boilers and heaters.
- c. An engineering study must be completed on each heater that must be controlled after the compliance plan is developed. WRR is in the process of installing NOx controls on several heaters at this time as part of the above-described COP Consent Decree. The engineering phase of these projects has been up to 10 months long, depending on whether the heater fire box must be modified and how the original equipment must be changed. In many cases, these heaters have been chosen as the easiest and most cost-effective sources from which to obtain NOx emissions reductions at the refinery. Additional heaters are likely to require even more engineering resources and time to meet RACT emissions requirements since the retrofits are likely to be more complicated and more difficult to complete.
- d. Air construction permits may be needed on some units to ensure that the controls and other operational changes are federally enforceable. Permit applications typically take 2 to 3 months to prepare followed by another 3 months for IEPA review and approval.
- e. After the design is completed, equipment must be ordered and shutdown planning completed. Ultra Low NOx burners, which are the apparent RACT control technology proposed in the draft proposal, are taking at least 6 months for delivery for our existing projects. Shutdown planning and preparation can occur during this time, but very little other work can move forward.
- f. In all, WRR may need to install emission controls, or make other changes, on 19 boilers and heaters, across 13 operating units. Typically, WRR completes maintenance turnarounds on a 5 year cycle with all units scheduled sometime during the cycle. A few of the affected heaters and one of the boilers are scheduled for a maintenance turnaround during 2008 and 2009. The remaining units are not scheduled before the 2010 deadline but instead are planned through 2011. Early turnarounds to upgrade other heaters will impact the Midwest fuel supply, including the entire state of Illinois, potentially causing significantly higher gasoline and diesel fuel costs for a period of time.

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g. In addition, it is unlikely that sufficient contractor maintenance staff will be available to complete all of the heater and boiler upgrades that are required. Performance testing contractors may also not be available to certify the new controls as required in the draft proposal.

Based on these reasons, WRR suggests that the compliance deadline be extended until at least December 31, 2013. We further suggest, to show ongoing improvement during the intervening period, that a schedule for implementation of NOx controls could be submitted by affected parties by January 1, 2009, with a requirement for 25% of proposed NOx controls in place by May 1, 2010. This extended schedule would help satisfy the "reasonably available" definition for RACT.

#### Subpart D: Industrial Boilers

Proposed Section 217.160 describes what industrial boilers are included in the draft proposal and includes an emission limit for these boilers. WRR industrial boilers burn only gaseous fuels and our comments will be limited to this subset. The gaseous fuel that is burned on the WRR site includes natural gas and refinery gas. Refinery gas is similar to natural gas, but includes other hydrocarbon compounds that increase NOx emissions to some degree. Refinery gas is a co-product of the refining process and is typically consumed by onsite heaters and boilers to improve overall refining energy efficiency and reduce flaring.

The draft proposal includes emission limits for boilers greater than 100 MMBTU/hr of 0.080 lb/MMBTU. This proposed RACT emission limit is overly stringent for typical industrial boilers when burning refinery fuel gas. This emission limit will require the equivalent of Ultra Low NOx control technology that is well beyond RACT.

WRR is presently designing NOx controls for an existing onsite boiler as part of its Consent Decree requirements to reduce overall NOx emissions. This boiler is larger than 100 MMBTU/hr and does not have NOx emission reducing burners at this time. The Consent Decree requires that Ultra Low NOx burners (ULNB) be installed to qualify for NOx reduction credit. The burner vendor will guarantee that the boiler will perform better than 0.070 lbs NOx / MMBTU with the ULNB. It has taken more than 10 months to design the retrofit for this boiler. The permit application is in preparation and should be submitted in 2 months. We expect it will take approximately 3 months before IEPA will issue the permit. A three week long shutdown is scheduled for the boiler during the third quarter of 2008 to modify the boiler. Total time for this project to be completed will be at least 20 months. Fortunately, this emission control system will be in place before May 1, 2010. The estimated cost of the control system per ton of NOx controlled is in excess of \$20,000 per ton NOx controlled, without considering the installation of a NOx CEMS. A summary of the cost evaluation will be provided under separate, business confidential, cover.

The above boiler was selected for retrofitting because it had one of the easiest configurations to make the required changes when compared to the other boilers on the WRR site. The cost per ton controlled for retrofitting the other boilers is expected to be higher.

WRR believes that the draft proposal RACT for industrial boilers is too stringent, based on the cost of control and the guaranteed emission factor. RACT is defined in 40CFR51.100(o) as:

- o) << Reasonably available control technology>> (RACT) means devices, systems, process modifications, or other apparatus or techniques that are reasonably available taking into account:
  - The necessity of imposing such controls in order to attain and maintain a national ambient air quality standard;
  - The social, environmental, and economic impact of such controls; and

Mr. Rob Kaleel January 8, 2008

(3) Alternative means of providing for attainment and maintenance of such standard. (This provision defines RACT for the purposes of §51.341(b) only.)

The term "reasonable" is defined in Webster's New College dictionary as "governed by or in accordance with reason or sound thinking", "within the bounds of common sense," and finally "not extreme or excessive." WRR believes that these definitions should be used in determining what a RACT technology is. Using these definitions, RACT is technology where equipment is readily available, can be obtained on a timely basis, and can be installed for a cost is not excessive. Common sense should prevail in making these decisions. Generally, RACT should not mean "best available", since this could imply a stretch, technically and economically, for the facilities where the rule applies.

Item (2) says that social, environmental AND economic impact of such controls must be taken into account. The proposed emission factor of 0.080 for boilers does not adequately consider the economic consequences on the companies that are required to install these controls. In addition, ULNB are currently "best available control technology" (BACT) for industrial boilers and are only required for new or significantly modified units. A comparison of the cost of the NOx control on this boiler is 8 to 10 times more costly than the typical RACT control cost per ton (\$2,000-2,500) in other moderate nonattainment areas.

IEPA must reconsider the economic impact that the proposed low emission factor will have on industry. We recommend 0.12 lb NOx/MMBTU that is recommended by IERG in their comments. We believe that this emission factor can be reasonably achieved while satisfying all the parameters that must be considered.

#### Subpart E: Process Heaters

Proposed Section 217.184 describes what process heaters are included in the draft proposal and includes an emission limit for these heaters. WRR process heaters burn only refinery gaseous fuels, as described above, and our comments will be limited to this subset.

As noted above, the gaseous fuel that is burned on the WRR site includes natural gas and refinery gas. Refinery gas is similar to natural gas, but includes other components that increase NOx emissions to some degree. The draft proposal includes emission limits for boilers greater than 100 MMBTU/hr of 0.070 lb/MMBTU. This proposed emission limit is too stringent for typical process heaters and requires Ultra Low NOx control technology that is well beyond RACT.

WRR is in the process of installing NOx controls in an existing process heater as part of its Consent Decree requirements to reduce overall NOx emissions. This heater is slightly smaller than 100 MMBTU/hr, however, it serves as an excellent example of the economic consequence of retrofitting existing process heaters with ULNB. The process heater does not have NOx emission reducing burners at this time. The Consent Decree requires that Ultra Low NOx burners (ULNB) be installed to qualify for NOx reduction credit. The burner vendor will guarantee that the boiler will perform at least at 0.050 lbs NOx / MMBTU with the ULNB. The ULNB changes to this unit were designed over a 6 month period and are already permitted. A significant modification to the floor of the heater is required to accommodate the ULNB. The estimated cost of the control system per ton of NOx controlled is in excess of \$15,000 per ton NOx controlled, without considering the installation of a NOx CEMS. A summary of the cost evaluation will be provided under separate, business confidential, cover.

WRR has 16 process heaters with heat input capacities greater than 100 MMBTU/hr and, thus, must evaluate how to control NOx emissions under the RACT rule. The process heater described above was selected for early NOx emission reductions primarily because it was one of the easiest to retrofit. The installation of NOx emission controls on the remaining process heaters will involve more detailed engineering to evaluate how the fire boxes and floors must be modified to include ULNB and what other

\* \* \* \* \* PC # 5 \* \* \* \* \*

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changes (heater tubes) must be moved to allow for the longer flame front that occurs with ULNB use. The cost per ton NOx controlled for each additional process heater is expected to be significantly greater than the heater described. We are currently evaluating installation of NOx controls on several other heaters with the potential cost in excess of \$20,000 per ton NOx controlled in order to meet our Consent Decree requirements. We are not required to install emission controls on all heaters to comply with the Consent Decree. The calculated costs to achieve the IEPA proposed RACT is far above the generally accepted US EPA guidance of \$2,000 per ton controlled.

WRR believes that the draft proposed RACT of 0.070 lb NOx/MMBTU is too stringent for process heaters. The above example of an actual project to retrofit an existing heater shows that the cost of this control is far beyond what is normally considered acceptable economic impact from a RACT rule. The 0.070 lb/MMBTU limit will require ULNB on nearly every heater in the refinery, at a cost of tens, and potentially hundreds, of millions of dollars. Other facilities in the non-attainment areas could be similarly affected. This economic impact is unacceptable since RACT must consider economic impacts when selecting the technology.

WRR agrees with the IERG suggestion that the NOx emission limit for process heaters be set at 0.12 lb NOx/MMBTU. This limit will significantly lower NOx emissions from existing process heaters and meet the intent of RACT controls, while somewhat reducing economic impacts. This 0.12 lb NOx / MMBTU emission limit will still require a major and expensive NOx control program, far beyond what is required under the COP Consent Decree.

#### **Testing and Monitoring**

Proposed Sections 217.168 and 217.188 list the proposed testing and monitoring requirements for this draft proposed rulemaking. These sections require that any industrial boiler or process heater unit over 100 MMBTU/hr must install a CEMS to monitor and record NOx emissions. This is expected to require the installation of approximately 10 CEMS at WRR based on the number of process heaters at an estimated cost of about \$500 M per installation, and a total estimated cost of \$5 MM. These heaters are not currently required to have NOx CEMS installed, but must only demonstrate in a performance test that the emission factor, combined with the heater capacity will not exceed permit limits. The installation of CEMS on process heaters is a complicated project, since most of these heaters do not have exhaust stacks designed for this installation. Purchase of the analyzer is a small portion of the cost of installation, since the units must have appropriate power installed, weatherproof shelters and other required systems.

WRR believes that CEMS should be limited to those units greater than 250 MMBTU/hr, as discussed in the IERG comments. In addition, we believe that annual performance testing is sufficient for process heaters that are included in an averaging plan, since the low NOx burners are generally not subject to significant variation from demonstrated emission factors during normal operation. Annual performance testing will provide confirmation of emission factors and allow IEPA to adequately monitor degradation in emission control performance without burdening industry with unneeded continuous monitoring.

#### Case-by-Case RACT

The rule should contain a provision that allows for case-by-case RACT determination through the permitting process. The USEPA allows RACT determinations to be contained in federally enforceable permits for SIP purposes and the Agency believes it is authorized to make case-by-case MACT determinations by federal law. Allowing case-by-case RACT determinations through the permitting process would be an effective and efficient means for addressing unique situations.

#### Summary

Mr. Rob Kaleel January 8, 2008

WRR strongly believes that the draft proposed RACT regulation does not represent RACT as intended by the USEPA. The timing of the must be changed to allow time to identify, engineer and install the controls without overly burdening the affected parties. The stringency of the emission factors for gaseous fired boiler and heaters must be changed to better reflect economically available NOx emission controls. The current proposed emission limits appear to represent BACT rather than RACT, particularly given the expected high costroquined to remoth WIRR heaters and boilers. The requirement to continuously monitor all the restand boilers (greater than 100) MMISTED thris overly burdensome when annual performance testing should be sufficient. Finally, there are some fired sources that where RACT should be determined based on a case-by case basis, due to the difficulty in retrofitting those units.

Please contact David Duna at 618-255-2458 httpot have questions regarding these comments.

Sincercly

David Dum.

Director, Bayironmental

Jawellu)!

# ATTACHMENT B NON-DISCLOSABLE INFORMATION

Electronic Filing - Received, Clerk's Office, January 20, 2009

\* \* \* \* \* PC # 5 \* \* \* \* \*

# ATTACHMENT C NON-DISCLOSABLE INFORMATION

# Boiler and Heater Descriptions - Wood River Refinery

#### **Boiler 15**

• Utility Boiler for steam generation

• Age of Boiler:

50+ years

• Capacity:

360 MMBtu/hr

• Original boiler control system:

Pneumatic controls

• Update boiler control system:

1984

• converted to Honeywell Distributive Control System (DCS)

• Original burner management system:

1950's, electronic relays / switches

• Updated burner management system:

October 2008

• Original burners:

1950's

• Updated burners:

~1981

• Current Ultra Low NOx Burner installation: October 2008

• Permitted Emission factor:

0.07 lb NOx/MMBtu

Boiler 15 was retrofitted in October 2008 to meet NFPA standards.

# Reported NOx Emissions by year:

2004:	123.1 tons	Emission factor:	0.13 lb NOx/MMBtu
2005:	106.9 tons	Emission factor:	0.12 lb NOx/MMBtu
2006:	53.1 tons	Emission factor:	0.12 lb NOx/MMBtu
2007:	129.1 tons	Emission factor:	0.15 lb NOx/MMBtu

# Alky HM-2 Heater

• Alkylation Unit Heat Medium (HM) heater

Age of Heater: 50+ years
Capacity: 99 MMBtu/hr

• Original heater control system: Pneumatic controls

• Update heater control system: November 2007.

converted to Honeywell Distributive Control System (DCS)

• Original burner management system:

Limited but sufficient burner management system

Updated burner management system: April 2008
 Original burners: 1950's

• Updated burners: ~1963

• Current Ultra Low NOx Burner installation: March 2008

• Permitted Emission factor: 0.04 lb NOx/MMBtu

Alky HM-2 was retrofitted in March 2008 to meet ConocoPhillips Corporate heater standards.

# Reported NOx Emissions by year:

2004:	83.36 tons	Emission factor:	0.27 lb NOx/MMBtu
2005:	76.63 tons	Emission factor:	0.27 lb NOx/MMBtu
2006:	84.08 tons	Emission factor:	0.27 lb NOx/MMBtu
2007:	85.17 tons	Emission factor:	0.27 lb NOx/MMBtu