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

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

Timothy Fox, Esq.
Hearing Officer
Illinois Pollution Control Board
100 W. Randolph Street
Suite 11-500
Chicago, Illinois 60601
(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 ENTRY OF APPEARANCE OF KATHERINE D. HODGE ON BEHALF OF CONOCOPHILLIPS COMPANY, ENTRY OF APPEARANCE OF MONICA T. RIOS ON BEHALF OF CONOCO PHILLIPS COMPANY and PRE-FILED TESTIMONY OF DAVID W. DUNN ON BEHALF OF CONOCOPHILLIPS COMPANY, copies of which are herewith served upon you.

Respectfully submitted,

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

Dated: November 25, 2008

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 ENTRY OF APPEARANCE OF KATHERINE D. HODGE ON BEHALF OF CONOCOPHILLIPS COMPANY, ENTRY OF APPEARANCE OF MONICA T. RIOS ON BEHALF OF CONOCOPHILLIPS COMPANY and PRE-FILED TESTIMONY OF DAVID W. DUNN ON BEHALF OF 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 November 25, 2008; and upon:

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

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 62701-1271

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

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

Springfield, Illinois on November 25, 2008.

/s/ Katherine D. Hodge
Katherine D. Hodge

CNPH:007Fil/COS - Pre-Filed Testimony of David Dunn

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)	

ENTRY OF APPEARANCE OF KATHERINE D. HODGE ON BEHALF OF CONOCOPHILLIPS COMPANY

NOW COMES Katherine D. Hodge, of the law firm HODGE DWYER ZEMAN, and hereby enters her appearance in this matter on behalf of CONOCOPHILLIPS COMPANY.

Respectfully submitted,

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

Dated: November 25, 2008

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

CNPH:007/Fil/EOA - KDH

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)	

ENTRY OF APPEARANCE OF MONICA T. RIOS ON BEHALF OF CONOCOPHILLIPS COMPANY

NOW COMES Monica T. Rios, of the law firm HODGE DWYER ZEMAN, and hereby enters her appearance in this matter on behalf of CONOCOPHILLIPS COMPANY.

Respectfully submitted,

By: /s/ Monica T. Rios

Monica T. Rios

Dated: November 25, 2008

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

CNPH:007/Fil/EOA - MTR

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)	

PRE-FILED TESTIMONY OF DAVID W. DUNN ON BEHALF OF CONOCOPHILLIPS COMPANY

NOW COMES CONOCOPHILLIPS COMPANY, by and through its attorneys, HODGE DWYER ZEMAN, and submits the following PRE-FILED TESTIMONY OF DAVID W. DUNN for presentation at the December 9, 2008 hearing scheduled in the above-referenced matter.

Pre-Filed Testimony of David W. Dunn

I. <u>INTRODUCTION</u>

Good Morning. My name is David Dunn, and I am the Environmental Director at the Wood River Refinery, which is owned by WRB Refining LLC, and operated by ConocoPhillips Company ("ConocoPhillips"). WRB Refining LLC is a joint venture between ConocoPhillips and Encana Corporation that was created on January 1, 2007. I have been employed by ConocoPhillips in this position for approximately two years. Prior to that date, I held various environmental and safety positions within ConocoPhillips, including most recently Vice President-HSE for Dubai Petroleum Company, a ConocoPhillips subsidiary. I have been implementing environmental regulatory compliance in industrial situations for more than twenty-five years. I hold a Master's degree in Environmental Engineering and a Chemical Engineering degree, and I

am a professional engineer registered in the State of Texas. Thank you for the opportunity to present my testimony today.

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 several hundred contractors. WRR is located in Madison County, Illinois, which is part of the MetroEast non-attainment area. There are six boilers and at least forty-one process heaters at WRR that will be affected in some manner by this rulemaking. Of this total, four boilers and seventeen process heaters are greater than 100 MMBtu/hr, and will either require emission controls to meet the proposed emission limits or be included in some averaging strategy to meet the proposed alternative standard. My testimony today reflects a careful consideration of the Illinois Environmental Protection Agency's ("Illinois EPA") proposal in this proceeding, a comparison against the ongoing NOx reduction projects at WRR, as well as my recent discussions with representatives of the Illinois EPA regarding the compliance date and other significant issues. The Illinois EPA's proposal, if adopted by the Illinois Pollution Control Board ("Board"), will significantly affect WRR operations by requiring overly stringent and unreasonable NOx controls to be installed on many boilers and heaters. ConocoPhillips is a member of the Illinois Environmental Regulatory Group ("IERG") and supports the comments made here today by IERG. I would like to provide information to the Board on the specific impacts this regulatory proposal could have on the WRR.

For background purposes, WRR 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. Consent Decree, *United States, et al. v. ConocoPhillips Co.*, No.

H-05-0258 (S.D. Tex. Dec. 5, 2005). The Consent Decree includes significant requirements to reduce NOx emissions from existing heaters and boilers throughout ConocoPhillips' U.S. refineries, including those located in Illinois. Many of the comments provided herein are based on the experience we have gained in implementing those Consent Decree provisions.

I would like to thank the Illinois EPA for its cooperation in working with ConocoPhillips to develop an alternative compliance schedule for petroleum refineries. ConocoPhillips supports the Illinois EPA's proposed compliance schedule provisions that were recently developed for refineries. The general compliance date included in the original rulemaking proposal is simply not achievable for WRR, based on the remaining time to design, plan, purchase control equipment, install the controls, and complete performance testing on a large number of emission units. Further, installation of the controls included in the proposed draft will require entire processing units to be shut down for several weeks, if not months. Very few of the affected units are currently scheduled for maintenance turnarounds before the general compliance deadline of May 1, 2010, and only those emission controls currently required by the Consent Decree are planned for installation. Any additional, unscheduled refinery unit shutdowns will have a significant effect on the fuel supply in the Midwest market.

II. COMPLIANCE DEADLINE

The Illinois EPA's proposal here includes a general 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 the proposed rule should include an alternative compliance date for petroleum refineries, as follows:

- A. As of the date of this hearing, only approximately seventeen months remain before compliance must be certified. The proposed regulation is still just at proposal and affected entities 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 potentially affected heater and boiler at WRR 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 WRR's compliance plan can be finalized. The averaging plan included in the Illinois EPA's proposal must be evaluated to determine if certain equipment can be over-controlled to balance out under-controlled equipment. While WRR has been assessing the impact of the regulation in anticipation of installing some form of emission controls at some future time, full development of the compliance plan is expected to take WRR at least six months and will probably remain open to modification several months after that as 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 Consent Decree. The engineering phase of these projects has been at least six months and up to ten months long, depending on whether the heater fire box must be modified and how the

original equipment must be changed. In many cases, the heaters for which projects have been identified for Consent Decree emission control are the easiest and most cost-effective sources from which to obtain NOx emissions reductions at WRR. Emission controls on the remaining heaters, as projected for compliance with this regulatory proposal, 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 for some units to ensure that the controls and other operational changes are federally enforceable. Permit applications typically take two to four months to prepare, followed by another two to three months for Illinois EPA review and approval.
- E. After the design is completed, equipment must be ordered and shutdown planning completed. Low NOx Burners and Ultra Low NOx Burners, which are the apparent RACT control technologies for fuel gas combustion devices proposed in the draft proposal, are taking at least six 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 many boilers and process heaters, across nine operating units. Typically, WRR completes maintenance turnarounds on a five to six year cycle with all units scheduled sometime during the cycle. A few of the process units that include affected heaters are scheduled for a maintenance turnaround during 2009. However, the evaluation and design requirements to install NOx reducing technologies has not been completed due to

the uncertainty of the final regulations and the inability to complete the work before the turnaround begins. The remaining units are not scheduled before the 2010 deadline but instead are planned through 2015. Early, unscheduled turnarounds to upgrade other process heaters will impact the Midwest fuel supply, including the entire state of Illinois, potentially causing significantly higher gasoline and diesel fuel costs.

Based on these reasons, WRR supports the alternative compliance schedule for petroleum refineries as proposed by the Illinois EPA. However, in the future, we may suggest minor revisions to the proposed language, if necessary, to clarify any issues that may be raised during this proceeding.

III. SUBPART D: INDUSTRIAL BOILERS

Proposed Section 217.160 describes the industrial boilers that are included in the draft proposal and includes an emission limit for such boilers. WRR industrial boilers burn only gaseous fuels and our comments will be limited to this subset. The gaseous fuel that is burned at the WRR site includes natural gas and refinery gas. Refinery gas is similar to natural gas, but includes other hydrocarbon compounds that may increase NOx emissions to some slight 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 an emission limit for boilers greater than 100 MMBtu/hr of 0.08 lb/MMBtu. This proposed RACT emission limit is overly stringent for typical gas-fired industrial boilers. This emission limit will require the equivalent of Ultra Low NOx control technology to ensure compliance and is well beyond RACT.

WRR recently installed NOx emission controls for an existing onsite boiler as part of its Consent Decree requirements to reduce overall NOx emissions. This boiler is approximately 360 MMBtu/hr, and did not have NOx emission reducing burners. The Consent Decree requires that Ultra Low NOx Burners ("ULNB") be installed to qualify for NOx reduction credit. The burner vendor has guaranteed that the boiler will perform better than 0.070 lbs NOx/MMBtu with the ULNB. It took more than ten months to design the retrofit for this boiler. The retrofit included some firebox modifications to ensure good combustion and reliable operation of the boiler and to allow ULNBs to fit into the boiler. The construction permit application took approximately three months to prepare. It took two months for the Illinois EPA to issue the construction permit. The ULNBs were installed during a recent maintenance turnaround. Total time for this project to be completed was approximately twenty-one months. Fortunately, this emission control system is 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. The NOx CEMs that monitors this boiler was previously installed and complies with 40 CFR Part 75 requirements. This boiler was selected for retrofitting because it had one of the easiest configurations to make the required changes when compared to the other boilers and heaters on the WRR site. The cost per ton controlled for retrofitting the other boilers and heaters is expected to be considerably higher.

WRR believes that the proposed RACT limits for industrial boilers are too stringent, based on the cost of control and the guaranteed emission factor. RACT is defined in 40 C.F.R. § 51.100(o) as:

Reasonably available control technology (RACT) means devices, systems, process modifications, or other apparatus or techniques that are reasonably available taking into account:

- (l) The necessity of imposing such controls in order to attain and maintain a national ambient air quality standard;
- (2) The social, environmental, and economic impact of such controls; and
- (3) Alternative means of providing for attainment and maintenance of such standard.

40 C.F.R. § 51.100(o).

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 selecting RACT. 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 that is not excessive. Common sense should prevail in making these decisions. RACT should not mean "best available," since this could imply a stretch, technically and economically, for the facilities where the rule applies.

Section 51.100(o)(2) provides that social, environmental <u>AND</u> economic impact of such controls must be taken into account. 40 C.F.R. § 51.100(o)(2). (Emphasis added.) 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 eight to ten times more costly than the typical RACT control cost per ton (\$2,500 - 3,000) in other nonattainment areas.

Note that the costs of the RACT limits proposed by the Illinois EPA will probably far exceed the \$2,500 to \$3,000 per ton range the Illinois EPA has used in its calculations. *See* Illinois EPA's Answers to Midwest Generation's Questions, R08-19 at 2 (Ill.Pol.Control.Bd. Sept. 30, 2008) and Hearing Transcript, R08-19 at 165 (Ill.Pol.Control.Bd. Oct. 14, 2008).

The Board must reconsider the economic impact that the proposed low emission limit will have on industry. We recommend 0.12 lb NOx/MMBtu, as suggested by IERG. We believe that this emission limit can be reasonably achieved while satisfying all the parameters that must be considered.

IV. SUBPART E: PROCESS HEATERS

Proposed Section 217.184 describes the process heaters that are included in the draft proposal and includes an emission limit for such heaters. WRR process heaters burn only refinery gaseous fuels, as described above, and our comments will be limited to this subset. The draft proposal includes emission limits for process heaters greater than 100 MMBtu/hr of 0.07 lb/MMBtu. This proposed emission limit is too stringent for typical process heaters and requires that all affected process heaters install Low NOx Burners or ULNB control technology that is well beyond RACT.

In April 2008, WRR completed the installation of ULNB emission 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 did not have NOx emission reducing burners prior to the installation. The Consent Decree requires that ULNB be installed to qualify for NOx

reduction credit. The burner vendor guaranteed that the process heater would perform at least at 0.050 lbs NOx/MMBtu with the ULNB. The ULNB changes to this unit were designed over a six month period and then permitted over a twelve month period as part of a larger project. A significant modification to the floor of the heater was required to accommodate the required spacing for the ULNBs but no changes were required to the firebox itself. The estimated project 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. CEMs were not required for this project because the heater was designed and operated at less than 100 MMBtu/hr.

WRR has seventeen process heaters with heat input capacities greater than 100 MMBtu/hr and, thus, must evaluate how to control NOx emissions under the proposed 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 changes (heater tubes) must be moved to allow for the longer flame front that occurs with ULNB use. A preliminary review of the large heater designs indicate that more than half of the fire boxes could require some modification in order to install Low NOx Burners or ULNBs to replace existing burners. In some cases, it may be more economical to completely replace a process heater.

There are also some critical process heaters that are unique. For example, one potentially affected heater has 192 burners and retrofitting with Low NOx Burners or ULNBs is not appropriate. A heater of this type may require installation of Selective

Catalytic Reduction emission control, which is significantly more expensive and has significantly higher operating and maintenance costs.

The cost per ton NOx controlled for each additional process heater is expected to be significantly greater than the heater described in our example. 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.

WRR is not required to install emission controls on all process heaters to comply with the Consent Decree. In fact, the Consent Decree requires relatively few of the process heaters, approximately four of the large process heaters and four of the smaller process heaters, to install NOx emission controls. The Consent Decree also allows flexibility in the selection of what process heaters will be controlled. The proposed rule does not provide significant flexibility, other than a flawed averaging plan, in selecting what heaters must be controlled. As a result, the calculated costs to achieve the limits proposed by the Illinois EPA will likely be beyond the \$2,500 to \$3,000 per ton range the Illinois EPA has used in its calculations, as well as beyond the \$10,000 per ton controlled that USEPA generally used as the average cost of best available control technology during the negotiation of the Consent Decree. As ConocoPhillips has provided above, its calculated costs to comply with this rule, as written and without needed flexibility, are well over \$10,000 per ton controlled.

WRR believes that the draft proposed RACT limit of 0.07 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 0.07 lb/MMBtu limit will require ULNB on nearly every process 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 IERG's 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 Consent Decree.

V. AVERAGING PROVISIONS

WRR appreciates that the Illinois EPA has included an Emissions Averaging Plans option in the proposed rulemaking at proposed Section 217.158. We concur with the Illinois EPA that an emissions averaging option allows owners/operators of affected sources more flexibility in complying with the requirements of the proposal while achieving the same amount of emissions reduction at that location. However, the proposed averaging provisions should be revised.

The proposed emissions averaging plan focuses on allowing averaging of total NOx emissions from affected company-selected process heaters and boilers by use of a summing equation. Actual NOx emissions are compared to the Allowable NOx emissions based on emission factors and heat input. The concept of over-controlling some process heaters to offset other uncontrolled heaters is sound and could reduce the

overall cost to an affected facility. The proposed equation at Section 217.158(f) appears reasonable for most uses. However, as variations are applied, the equation fails to provide emission reduction credit where it is appropriate.

For example, the proposed equation does not appear to allow credit for boilers and process heaters that are no longer in use after 2001. WRR has, or will have, at least four process heaters and boilers that may fall into this category. The equation does not allow for this reduction, because it requires each process heater to include the actual emission factor times the heat input calculated from the fuel flow meter and the heating value of the fuel used during a given year. If no fuel is used, then no emissions are counted in the equation. However, the same equation is used for the allowable emissions sum. In this case, the proposed allowable emission factor (0.07) must be multiplied by the same heat input. Since there is no heat input, there is no credit given for the shutdown of the unit. Both the Actual emissions and the Allowable emissions terms are zero tons, when the Allowable emissions should be some positive tonnage based on historic operation. WRR believes that the Illinois EPA should allow emissions from shut down process heaters and boilers in the emissions averaging plan, based on the highest annual heat input at a given process heater or boiler since 2002.

Another variation for consideration is when a new process heater with ULNB controls is installed after January 1, 2002, replaces one or more process heaters, in such a way that it is excluded from Section 217.158(a)(1)(C), i.e., the new process heater is not used for the same purpose as the replacement unit. The existing process heaters will be shut down with no emissions credit given (see previous paragraph) and the resulting emissions from the new process heater will be significantly less than a replacement, but

still an increase. WRR believes that this type of replacement should be allowed, if not encouraged, and included in an averaging plan.

Another variation is an opportunity for a facility to achieve compliance with its averaging plan (decrease of a certain quantity of NOx emissions) by reducing firing in a process heater. In this example, a facility may have a sound plan in place for compliance, but must fire a higher NOx emitting process heater to support continuing operations while another process heater that has NOx emission controls undergoes maintenance. The current equation does not allow for the averaging plan to recover by reducing firing at the higher emitting process heater and increasing the firing at a lower emitting process heater, since the heat input remains on both sides of an equation. In this case, a facility can achieve the desired NOx emission reductions by reducing firing of the highest NOx emitting process heaters.

The proposed section for Emissions Averaging Plans is a strong step in the right direction. However, the proposal should be reviewed and revised to allow for true and valuable alternatives to the proposed fixed equations. These alternatives, as suggested herein, would help meet the needed NOx emissions reductions while providing compliance flexibility to operating facilities.

VI. TESTING AND MONITORING

Proposed Section 217.157 includes the proposed testing and monitoring requirements for this proposed rule. These provisions require that any industrial boiler or process heater unit over 100 MMBtu/hr must install a CEMs to monitor and record NOx emissions. As a result, WRR expects to have to install approximately eighteen CEMs based on the number of process heaters and one boiler, at an estimated cost of

approximately \$700,000 per installation, and a total estimated cost of \$12,600,000. These process 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 process heaters do not have exhaust stacks designed for easy installation, such as the requirement for certain distances from upstream and downstream interferences. Purchase of the analyzers is a small portion of the overall costs of installation, as most of the costs are associated with installation of weatherproof shelters, appropriate power, and other required systems and site-specific factors.

While WRR appreciates and supports the Illinois EPA's suggested language to allow a three-year extension for installation of CEMs, WRR believes that CEMs should be limited to those units greater than 250 MMBtu/hr. 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 and ULNBs 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 the Illinois EPA to adequately monitor degradation in emission control performance, without burdening industry with unneeded continuous monitoring.

VII. SUMMARY

WRR strongly believes that the Illinois EPA's proposal here does not represent RACT. WRR supports the alternative compliance schedule provisions for petroleum refineries. The stringency of the emission factors for gaseous fired boilers and process

Electronic Filing - Received, Clerk's Office, November 25, 2008

heaters must be changed to better reflect economically reasonable NOx emission

controls. The current proposed emission limits appear to represent BACT rather than

RACT, particularly given the expected high cost required to retrofit WRR process heaters

and boilers. The requirement to continuously monitor all process heaters and boilers

greater than 100 MMBtu/hr is overly burdensome, especially when annual performance

testing would be sufficient.

Thank you for the opportunity to present my testimony today. I am happy to

answer any questions.

ConocoPhillips reserves the right to supplement this pre-filed testimony.

Respectfully submitted,

By: /s/ Katherine D. Hodge

Katherine D. Hodge

Dated: November 25, 2008

Katherine D. Hodge

Monica T. Rios

HODGE DWYER ZEMAN

3150 Roland Avenue

Post Office Box 5776

Springfield, Illinois 62705-5776

(217) 523-4900

CNPH:007Fil/Pre-filed Testimony - David Dunn 11.25.08

16