

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD  
OF THE STATE OF ILLINOIS

WRB REFINING, LLC	)	
Aromatics West Heater Stack NOx	)	
Reduction Project	)	
	)	PCB 12-
	)	(Tax Certification - Air)
PROPERTY IDENTIFICATION NUMBER	)	
19-1-08-35-00-000-001 or portion thereof	)	

NOTICE

TO: [Electronic filing]  
John Therriault, Assistant Clerk  
Illinois Pollution Control Board  
State of Illinois Center  
100 W. Randolph Street, Suite 11-500  
Chicago, Illinois 60601

[Service by mail]  
Michael Kemp  
WRB Refining, LLC  
404 Phillips Building  
Bartlesville, Oklahoma 74004

[Service by mail]  
Steve Santarelli  
Illinois Department of Revenue  
101 West Jefferson  
P.O. Box 19033  
Springfield, Illinois 62794

PLEASE TAKE NOTICE that I have today electronically filed with the Office of the Pollution Control Board the **APPEARANCE** and **RECOMMENDATION** of the Illinois Environmental Protection Agency, a paper copy of which is herewith served upon the applicant and a representative of the Illinois Department of Revenue.

Respectfully submitted by,

/s/ Robb H. Layman  
Robb H. Layman  
Assistant Counsel

Date: November 28, 2011

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, IL 62794-9276  
Telephone: (217) 524-9137

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD  
OF THE STATE OF ILLINOIS**

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Reduction Project	)	
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PROPERTY IDENTIFICATION NUMBER	)	
19-1-08-35-00-000-001 or portion thereof	)	

**APPEARANCE**

I hereby file my Appearance in this proceeding on behalf of the Illinois Environmental Protection Agency.

Respectfully submitted by,

/s/ Robb H. Layman  
 Robb H. Layman  
 Assistant Counsel

Date: November 28, 2011

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**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD  
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PROPERTY IDENTIFICATION NUMBER	)	
19-1-08-35-00-000-001 or portion thereof	)	

**RECOMMENDATION**

NOW COMES the ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (“Illinois EPA”), through its attorneys, and pursuant to 35 Ill. Adm. Code 125.204 of the ILLINOIS POLLUTION CONTROL BOARD’S (“Board”) procedural regulations, files the Illinois EPA’s Recommendation in the above-referenced request for tax certification of pollution control facilities. The Illinois EPA recommends **issuance** of a tax certification covering the subject matter of the request. In support thereof, the Illinois EPA states as follows:

1. On or about October 14, 2010, the Illinois EPA received an application and supporting information from WRB REFINING, LLC, (“WRB Refining”) concerning the proposed tax certification of certain air emission sources and/or equipment located at its Wood River petroleum refinery in Madison County, Illinois. A copy of the application is attached hereto. **[Exhibit A]**.

2. The applicant’s principal business address is as follows:

WRB Refining LLC  
404 Phillips Building  
Bartlesville, Oklahoma 74004

3. The facility address is as follows:

WRB Refining LLC  
900 South Central Avenue  
P.O. Box 76  
Roxana, Illinois 62084

4. The subject matter of this request involves the installation of control equipment for achieving reductions in emissions of nitrogen oxides (“NOx”) from the major process units of the Aromatics West Area of the refinery. The control device consisted of a new selective catalytic reduction (“SCR”) system and associated equipment, including an ammonia storage tank and pumps, aromatic vaporizers, an ammonia injection grid, SCR reactor and an induced draft fan. The system injects ammonia into the flue gas stream and the resulting mixture is directed through a catalyst bed at high temperature. The catalytic reaction produces nitrogen and water. As a result, the Aromatics West Heater Stack NOx Reduction Project acts to reduce or prevent the release of NOx emissions from the refinery that would otherwise be emitted to the atmosphere.

5. Section 11-10 of the Property Tax Code, 35 ILCS 200/11-10 (2002), defines “pollution control facilities” as:

“any system, method, construction, device or appliance appurtenant thereto, or any portion of any building or equipment, that is designed, constructed, installed or operated for the primary purpose of: (a) eliminating, preventing, or reducing air or water pollution... or (b) treating, pretreating, modifying or disposing of any potential solid, liquid, gaseous pollutant which if released without treatment, pretreatment, modification or disposal might be harmful, detrimental or offensive to human, plant or animal life, or to property.”

6. Pollution control facilities are entitled to preferential tax treatment, as provided by 35 ILCS 200/11-5 (2002).

7. Based on information in the application and the underlying purpose of the Aromatics West Heater Stack NOx Reduction Project to prevent, eliminate or reduce air pollution, it is the Illinois EPA’s engineering judgment that the various systems, constructions, devices and/or buildings or equipment from the project relating to air pollution control may be considered as “pollution control facilities” in accordance with the statutory definition and consistent with the Board’s regulations at 35 Ill. Adm. Code 125.200. **[Exhibit B]**.

8. Because the substantive components of the application for the Aromatics West Heater Stack NOx Reduction satisfies the aforementioned criteria, the Illinois EPA recommends that the Board **issue** the applicant's requested tax certification.

Respectfully submitted by,

*/s/ Robb H. Layman*

Robb H. Layman  
Assistant Counsel

DATED: November 28, 2011

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY  
1021 North Grand Avenue East  
P.O. Box 19276  
Springfield, Illinois 62794-9276  
Telephone: (217) 524-9137

**CERTIFICATE OF SERVICE**

I hereby certify that on the 28<sup>th</sup> day of November, 2011, I electronically filed the following instruments entitled **NOTICE, APPEARANCE** and **RECOMMENDATION** with:

John Therriault, Assistant Clerk  
Illinois Pollution Control Board  
100 West Randolph Street  
Suite 11-500  
Chicago, Illinois 60601

and, further, that I did send a true and correct paper copy of the same foregoing instruments, by First Class Mail with postage thereon fully paid and deposited into the possession of the United States Postal Service, to:

Steve Santarelli  
Illinois Department of Revenue  
101 West Jefferson  
P.O. Box 19033  
Springfield, Illinois 62794

Michael Kemp  
WRB Refining, LLC  
404 Phillips Building  
Bartlesville, Oklahoma 74004

/s/ Robb H. Layman

Robb H. Layman  
Assistant Counsel







**APPLICATION FOR CERTIFICATION (PROPERTY TAX TREATMENT)  
POLLUTION CONTROL FACILITY  
WRB – Wood River Refinery**

Project: Aromatics West Heater Stack NOx Reduction Project

Section C – Manufacturing Process

Process Description

The Aromatics West Area of the Wood River Refinery contains many process units with the common function of upgrading intermediate boiling range unfinished products into high quality low sulfur fuels (LPG, Gasoline, Diesel, etc.).

Catalytic Reformer #1 (CR-1) is an Aromatics West unit that uses high temperature and a precious metal catalyst to upgrade naphtha into a high octane gasoline blending component and produce hydrogen as a byproduct. Feed and recycle hydrogen is heated in a furnace and sent to the first reactor. As the naphtha reacts heat is lost so the product from the first reactor is heated in a second furnace and sent to a second reactor. Second reactor product is heated in a third furnace and sent to a third and fourth reactor. Down stream of the fourth reactor products are separated. The gas (mainly hydrogen) is separated from the liquid and a portion of the gas is recycled to the front of the system and a product hydrogen portion is routed to other refinery units. The liquid is stabilized and sent to the Benzene Reduction Unit.

The Hydrocracker (HCU) is an Aromatics West unit that feeds gas oil and hydrogen over a fixed bed catalyst to produce low sulfur high quality diesel and naphtha.

The Ultralow Sulfur Diesel Hydrotreater (ULD) is an Aromatics West unit that uses hydrogen and catalyst to remove sulfur and nitrogen from diesel range feed to produce ultra low sulfur diesel.

The CR-1, HCU, and ULD units require high temperatures to complete fractionation and reaction steps. These high temperatures require a substantial amount of heat input to the process via fuel fired furnaces. Fuel fired furnaces produce nitrogen oxides (NOx) which is a pollutant released to the atmosphere in the furnace flue gas. NOx is formed when nitrogen and oxygen in the combustion air combine with one another at the high temperatures in a flame.

CR-1, HCU, and ULD heaters share a common heater stack to route heater flue gas to the atmosphere.

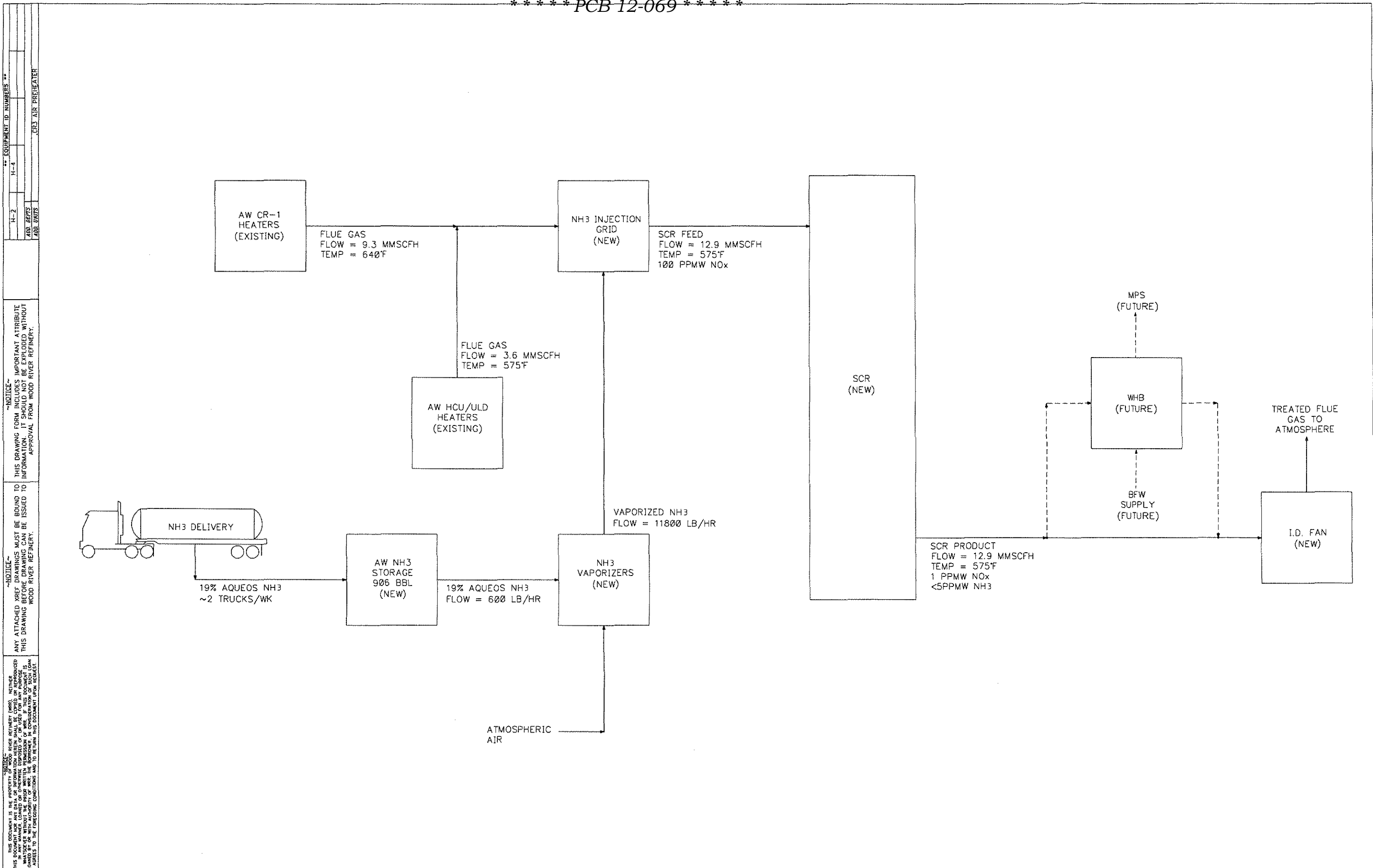
Section D – Pollution Control Facility Description

The Wood River Refinery is implementing the Aromatics West Heater Stack NOx Reduction Project for the sole purpose of reducing NOx pollution. This pollution control facility consists of a Selective Catalytic Reduction system (SCR) installed on the common CR-1, HCU, and ULD heater stack. The SCR system injects ammonia into the NOx containing heater flue gas and passes the mixture through a catalyst bed at elevated temperature. The catalyst enhances the reaction of ammonia with NOx to produce nitrogen and water. This project will directly reduce NOx emissions by 318 tons per year.

The new SCR system consists of an ammonia storage tank with pumps, ammonia vaporizers, an ammonia injection grid, the SCR reactor containing the SCR catalyst, and an induced draft fan. A simplified flow diagram of the SCR is attached.

The Aromatics West Heater Stack NOx Reduction Project is being installed for the sole purpose of reducing air pollution due to the emissions of NOx. The Wood River Refinery receives no financial benefit from this project.

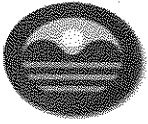
\*\*\*\*\*PCB 12-069\*\*\*\*\*



NOTICE - ANY ATTACHED XREF DRAWINGS MUST BE BOUND TO THIS DRAWING FORM INCLUDES IMPORTANT ATTRIBUTE INFORMATION. IT SHOULD NOT BE EXPLODED WITHOUT APPROVAL FROM WOOD RIVER REFINERY.

NOTICE - THIS DOCUMENT IS THE PROPERTY OF WOOD RIVER REFINERY (WRRI). NEITHER THIS DOCUMENT NOR ANY DATA OR INFORMATION HEREIN SHALL BE COPIED OR REPRODUCED IN ANY MANNER WITHOUT THE PRIOR WRITTEN PERMISSION OF WRRI. IF THIS DOCUMENT IS LOANED BY YOU TO ANOTHER PERSON, YOU ARE RESPONSIBLE FOR THE PROTECTION OF SUCH LOAN AND TO RETURN THIS DOCUMENT UPON REQUEST.

E20249 UTILITY FLOW DIAGRAM		- REFERENCE DRAWINGS -		*CAD DRAWING DO NOT REVISE MANUALLY*				FINAL APP. WOOD RIVER, ILLINOIS		Wood River Refinery		MASTER DRAWING YES/NO: YES	
ACCT. NO.	DATE	REVISION		NO.	DR.	CK.	APP.	ELECT. SIGN.	HARD SIGN.	BLOCK FLOW DIAGRAM AW SCR		PLOT SCALE: 1=1	
	6/2010	ISSUED FOR REVIEW		A	BSD	MCZ	ARE			SCALE: NONE		SHEET 1 OF 1 REV.	
DEPT.	UNIT	AROMATICS GENERAL		CAT.	GENERAL		PFD		E 77258 A		FORM DWG REVISED 04/19/06		



1021 NORTH GRAND AVENUE EAST, P.O. BOX 19506, SPRINGFIELD, ILLINOIS 62794-9506-(217) 782-2113

PAT QUINN, GOVERNOR

**Technical Recommendation for Tax Certification Approval**

Date: November 18, 2011  
To: Robb Layman  
From: Edwin C. Bakowski  
Subject: WRB Refining, LLC. TC-10-10-14Z

This Agency received a request on October 14, 2010 from WRB Refining, LLC. for an Illinois EPA recommendation regarding tax certification of air pollution control facilities pursuant to 35 Ill. Adm. Code 125.204. I offer the following recommendation.

The air pollution control facilities in this request include the following:

Aromatics West Heater Stack NOX Reduction Project consisting of the Catalytic Reformer #1, Hydrocracker, Ultralow Sulfur Diesel Hydrotreater with an SCR system installed on the heater stack. This system enhances the reaction of ammonia with NO<sub>x</sub> to produce nitrogen and water which reduces NOX emissions. Because the primary purpose of this system is to reduce or eliminate air pollution, it is certified as a pollution control facility.

This facility is located at 900 South Central Avenue, Roxana, Madison County. The property identification number is 19-1-08-35-00-000-001

Based on the information included in this submittal, it is my engineering Judgement that the proposed facility may be considered "Pollution Control Facilities" under 35 IAC 125.200(a), with the primary purpose of eliminating, preventing, or reducing air pollution, or as otherwise provided in this section, and therefore eligible for tax certification from the Illinois Pollution Control Board. Therefore, it is my recommendation that the Board issue the requested tax Certification for this facility.

FEM:jws

Exhibit B