BEFORE THE ILLINOIS POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS

WRB REFINING, LLC Aromatics West Heater Stack NOx Reduction Project

PROPERTY IDENTIFICATION NUMBER 19-1-08-35-00-000-001 or portion thereof PCB 12-(Tax Certification - Air)

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

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

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. Qauman

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

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)	

APPEARANCE

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

Protection Agency.

Respectfully submitted by,

ls<u>/ Robb H. Layman</u>

Robb H. Layman Assistant Counsel

Date: November 28, 2011

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

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS

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WRB REFINING, LLC Aromatics West Heater Stack NOx Reduction Project

PROPERTY IDENTIFICATION NUMBER 19-1-08-35-00-000-001 or portion thereof PCB 12-(Tax Certification - Air)

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.

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."

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. Qayman

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 28th 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

ls/ Robb H. Layman

Robb H. Layman Assistant Counsel

APPLICATION FOR CERTIFICATION (PROPERTY TAX TREATMENT) POLLUTION CONTROL FACILITY WATER 🔲 AIR 🗵

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY P. O. Box 19276, Springfield, IL 62794-9276

This Agency is authorized to request this information under Illinois Revised Statues, 1979, Chapter, 120, Section 502a-5. Disclosure of this information is voluntary. However, failure to comply could prevent your application from being processed or could result in denial of your application for certification.

	FOR AGENCY US	E			
File No.	Date Received	Certification No.	C	Date	
Sec. A	Company Name				
	WRB Refining LLC				
	Person Authorized to Receive Certification		Person to Contact for Additional Details		
	Michael Kemp		Gordon Terhune		
	Street Address	<u> </u>	Street Address		
	404 Phillips Building		900 S. Central Ave., P.O. Box 76		
	Municipality, State & Zip Code		Municipality, State & Zip Code		
ANN	Bartlesville, OK 74004		Roxana, IL 62084		
APPLICANT	Telephone Number		Telephone Number		
d d	(918) 661-9055		(618) 255-2876		
*	Location of Facility			Township	
	Quarter Section Township	Range	manopany	i e thiomp	
	1	`			
	Street Address		County	Book Number	
	900 S. Central Ave.		Madison		
	Property Identification Number		Parcel Number	······	
			19-1-08-35-00-000-001		
Sec. B	Nature of Operations Conducted at the Abov	ve Location		· · · · · · · · · · · · · · · · · · ·	
	Petroleum Refining				
Q					
A NS	Water Pollution Control Construction Permit	No	Date Issued		
		. NU.			
MANUFACTURING OPERATIONS	NPDES PERMIT No.	······································	Date Issued	Expiration Date	
NN OPI	IL0000205		04/14/04	04/14/09	
Ŕ	Air Pollution Control Construction Permit No		Date Issued		
).	Date Issued		
	Application to be filed in 2011		Data laguad		
	Air Pollution Control Operating Permit No.		Date Issued		
	95120306		11/07/03		
Sec. C	Describe Unit Process				
	See Aromatics West Heater Stack NOx Reduction Project attachment.				
o					
Ž					
ESS					
EAC DCC	Materials Used in Process				
Materials Used in Process Refinery intermediate boiling range hydrocarbon (naphtha, kerosene, diesel, gas oil)					
MA	Refinery intermediate boiling range hydrocarbon (haphtha, kerosene, diesel, gas oli)				
<u> </u>		4			
Sec. D	Describe Pollution Abatement Control Facili	τγ			
- Z	See Aromatics West Heater Stack NOx	Reduction Proje	ect attachment.		
TRO					
NON					
POLLUTION CONTROL FACILITY DESCRIPTION					
L DA					

IL 532-0222 APC 151 (Rev. 8/00) Tax Certification for Pollution Control Facilities

Page 1 of 2 8/00

Exhibit A

· -		Material Retained, Captured or Recovere				
i L	~~~~	ninant or Pollutant	DESCRIPTION	DISPOSAL OR USE		
	NOx		NOx is converted toN2	N2 gas released to atmosphere.		
	(2) Poi	nt(s) of Waste Water Discharg	e			
-			Plans and Specification	ns Attached Yes 🗌 🛛 🛛 🛛 🛛		
ŀ	(3)	Are contaminants (or residues)	collected by the control facility?			
		Date installation completed 10		on date of application 30%		
	(5) 8	TOTAL INSTALLED COS	1 1/1/ million and a second	\$ 75,000,000.00		
			INSIDERED REAL PROPERTY:	\$ 100,000.00		
			JAL INCOME OF CONTROL FACILITY	100,000.00		
5			INCOME OF CONTROL FACILITY:	0.00		
		·····		\$ 0.00		
			ACILITY BEARS TO WHOLE FACILIT	Y VALUE: % To Be Determined ax Code, as amended, and to the best of		
knowledge, is true and correct. The facilities claimed herein are "pollution control facilities" as defined in Sec Illinois Property Tax Code. <u>Low</u> <u>Director</u> PTRRC						
G	Signat		Title JCTIONS FOR COMPILING AND FILING A			
-	water op	: Separate applications must be corr verations are related, file two applications	pleted for each control facility claimed. Do ons. If attachments are needed, record ther	not mix types (water and air). Where both a m consecutively on an index sheet.		
	Sec. A	facilities. Define facility location by		contacted for further details or for inspection map location is required for facilities located d.		
	Sec. B	Self-explanatory. Submit copies o	f all permits issued by local pollution control	agencies. (e.g. MSD Construction Permit)		
	Sec. C	Refers to manufacturing processe	s or materials on which pollution control faci	lity is used.		
	Sec. D	State the type of control facility. S flow diagram describing the polluti	late permit number, date, and agency issuir	purpose is to eliminate, prevent or reduce politing permit. A narrative description and a procession procession procession of equipment included in the claiming effluent of the control facility stating the		
	Sec. E	disposal of any contaminants remo Item (1) – Refers to pollutants and Item (2) – Refers to water pollutior which clearly show (a) Point(s) of o facility. Item (3) – If the collected contamir in dollars reclaimed by sale or reu	oved from the manufacturing processes. contaminants removed from the process by but can apply to water-carried wastes from discharge to receiving stream, and (b) Sewe nants are disposed of other than as wastes, se of the collected substances. State the co pollution control facility was first placed in s	air pollution control facilities. Submit drawing ers and process piping to and from the control state the disposition of the materials, and the ost of reclamation and related expense. service and operated. If not, explain.		
		Item (5) - This information is asso		ions. This accounting data must be completed		
	Sec. F	Item (5) – This information is esse activate project review prior to cer		манналамалалалалалалалалалалалалалалалал		
	Sec. F	Item (5) – This information is esse activate project review prior to cer Self-explanatory. Signature must	ification by this Agency. be a corporate authorized signature.	A44		
	Sec. F	Item (5) – This information is esse activate project review prior to cer	ification by this Agency.	Attention:		

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.





Electronic Filing - Received, Clerk's Office, 11/28/2011 **** PCB 12-069 **** ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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_x 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