BEFORE THE ILLINOIS POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS

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WRB REFINING, LLC Aromatics North Flare Gas Recovery 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. 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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WRB REFINING, LLC Aromatics North Flare Gas Recovery Project

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

PCB 12-(Tax Certification - Air)

APPEARANCE

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

Protection Agency.

Respectfully submitted by,

1st 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, Illinois 62794-9276 Telephone: (217) 524-9137

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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 equipment to process units that generate low-volume and low-pressure streams containing hydrocarbons, hydrogen sulfides and ammonia, which are routed to a flare device at the Aromatics Area of the refinery. The Aromatics North Flare Gas Recovery Project consists of a new seal drum, liquid ring compressors and a pressure control system designed to recover streams from the process units that are continuously routed to the North Flare during routine and non-routine refinery operations. The installation of the new equipment will capture the hydrocarbon vapors and hydrogen streams, compress them and re-direct them to the fuel gas treating process, thus preventing the combustion of the contaminants from the flare device. In doing so, the equipment acts to reduce or prevent the release of volatile organic materials, sulfur oxides and nitrogen oxides that would otherwise be combusted 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."

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 North Flare Gas Recovery 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 North Flare Gas Recovery Project satisfies the aforementioned criteria, the Illinois EPA recommends that the Board **issue** the applicant's requested tax certification.

Respectfully submitted by,

1st 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 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. Qayman

Robb H. Layman Assistant Counsel

APPLICATION FOR CERTIFICATION (PROPERTY TAX TREATMENT) POLLUTION CONTROL FACILITY AIR 🖾 WATER 🗔

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

FOR AGENCY USE

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.

File No.	Date Received	Certification No.	r	ate		
Sec. A	Company Name					
000. A	WRB Refining LLC					
	Person Authorized to Receive Certification		Person to Contact for Additional Details			
	Michael Kemp		Gordon Terhune			
	Street Address		Street Address			
	404 Phillips Building		900 S. Central Ave., P.O. Box 76			
<u>ا</u>	Municipality, State & Zip Code		Municipality, State & Zip Code			
APPLICANT	Bartlesville, OK 74004		Roxana, IL 62084			
L L	Telephone Number		Telephone Number			
AF	(918) 661-9055		(618) 255-2876			
	Location of Facility Quarter Section Township	Range	Municipality	Township		
		Range				
	Street Address	<u>, ,</u> .	County I	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	e Location				
	Petroleum Refining					
MANUFACTURING OPERATIONS	,		······			
E E E	Water Pollution Control Construction Permit	No.	Date Issued			
RAT						
OPE	NPDES PERMIT No.		Date Issued	Expiration Date		
MA MA	IL0000205		04/14/04	04/14/09		
	Air Pollution Control Construction Permit No	l.	Date Issued			
	10060051		09/03/10 Date Issued			
	Air Pollution Control Operating Permit No. 95120306		11/07/03			
Sec. C	Describe Unit Process		<u>[[]]/07/05</u>	03		
060.0		.				
	See Aromatics North Flare Gas Recovery Project attachment.					
D N C						
SS						
L L L	Materials Used in Process					
MANUFACTURING PROCESS	Refinery intermediate boiling range hydrocarbons (naphtha, kerosene, diesel, gas oil)					
MAN	Hydrogen, Steam, Methane, Ethane, Propane, Hydrogen Sulfide, Ammonia					
	Trydrogen, olean, meulane, Eulane, Fropane, Frydrogen ounde, Annionia					
Sec. D	Describe Pollution Abatement Control Facility					
22	See Aromatics North Flare Gas Recovery Project attachment.					
L KE						
K SS						
DES						
See Aromatics North Flare Gas Recovery Project attachment.						
ACIL						

IL 532-0222 APC 151 (Rev. 8/00) Tax Certification for Pollution Cont Page 1 of 2 8/00

Exhibit A

Sec. E	(1) Na	(1) Nature of Contaminants or Pollutants							
		Material Retained, Captured or Recovered							
ATS.	Contaminant or Pollutant		DESCRIPTION		DISPOSAL OR USE				
INA		drocarbons	light (C1-C4) hydrocarb	Recovered, treated, used as fuel					
TAM	Sulfur compounds		H2S	Recovered as Product Sulfur					
1 NO	C02		Light Hydrocarbons	Recovered as product					
ГПТУ									
POLLUTION CONTROL FACILITY - CONTAMINANTS CONTAMINANTS	(2) Point(s) of Waste Water Discharge								
IROL									
LNO	Plans and Specifications Attached				Yes 🗌	No 🗵			
NO		Are contaminants (or residues) co	· · · · · · · · · · · · · · · · · · ·		Yes 🗵				
DITU _	┝╍┷┷┥╋	Date installation completed <u>12/31/11</u> status of installation on date of application <u>36%</u>							
OLL	(5)	a. TOTAL INSTALLED COST			\$ 45,000,000	.00			
d DN		b. NET SALVAGE VALUE IF CONSIDERED REAL PROPERTY: \$450,000.00							
ITNL		c. PRODUCTIVE GROSS ANNUAL INCOME OF CONTROL FACILITY: \$				\$ 0.00			
col		d. PRODUCTIVE NET ANNUAL IN	COME OF CONTROL FACILITY:		\$ 0.00				
AC		e. PERCENTAGE CONTROL FAC	LITY BEARS TO WHOLE FACILITY	VALUE:	[%] To Be Dete	rmined			
Sec. F	The following information is submitted in accordance with the Illinois Property Tax Code, as amended, and to the best of my knowledge, is true and correct. The facilities claimed herein are "pollution control facilities" as defined in Section 11-10 of the Illinois Property Tax Code.								
SIGNATURE		HenC. New DIRECTOR-PTRRC							
	Signature Title								
Sec. G		INSTRUCT	INSTRUCTIONS FOR COMPILING AND FILING APPLICATION						
	water o	General: Separate applications must be completed for each control facility claimed. Do not mix types (water and air). Where both air and water operations are related, file two applications. If attachments are needed, record them consecutively on an index sheet.							
	Sec. A	A Information refers to applicant as listed in the tax records and the person to be contacted for further details or for inspection of facilities. Define facility location by street address or legal description. A plat map location is required for facilities located outside of municipal boundaries. The property identification number is required.							
	Sec. B	Self-explanatory. Submit copies of all permits issued by local pollution control agencies. (e.g. MSD Construction Permit)							
	Sec. C	Refers to manufacturing processes or materials on which pollution control facility is used.							
INSTRUCTIONS	Sec. D	Narrative description of the pollution control facility, indicating that its primary purpose is to eliminate, prevent or reduce pollution. State the type of control facility. State permit number, date, and agency issuing permit. A narrative description and a process flow diagram describing the <u>pollution control facility</u> . Include a listing of each major piece of equipment included in the claimed fair cash value for real property. Include an <u>average</u> analysis of the influent and effluent of the control facility stating the collection efficiency.							
	Sec. E	List air contaminants, or water pollution substances released as effluents to the manufacturing processes. List also the final disposal of any contaminants removed from the manufacturing processes. Item (1) – Refers to pollutants and contaminants removed from the process by the pollution control facility. Item (2) – Refers to water pollution but can apply to water-carried wastes from air pollution control facilities. Submit drawings, which clearly show (a) Point(s) of discharge to receiving stream, and (b) Sewers and process piping to and from the control facility. Item (3) – If the collected contaminants are disposed of other than as wastes, state the disposition of the materials, and the value in dollars reclaimed by sale or reuse of the collected substances. State the cost of reclamation and related expense.							
		Item (4) – State the date which the pollution control facility was first placed in service and operated. If not, explain. Item (5) – This information is essential to the certification and assessment actions. This accounting data must be completed to activate project review prior to certification by this Agency.							
	Sec. F	Self-explanatory, Signature must be a corporate authorized signature.							
		Submit to:	Attention:	Attention:					
		Illinois EPA	Al Keller	Donald E. S					
		P.O. Box 19276 Springfield, IL 62794-9276	Permit Section Division of Water Pollution Control						
		3							

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

Project: Aromatics North Flare Gas Recovery Project

Section C – Manufacturing Process

Process Description:

The Aromatics 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.). Naphtha hydrotreaters use hydrogen and catalyst to remove sulfur and nitrogen from naphtha preparing it for further processing to high octane gasoline in a catalytic reformer. Other hydrotreaters remove sulfur from diesel range feed to produce ultra low sulfur diesel. The catalytic reformers process naphtha in the presence of hydrogen and catalyst to produce high octane gasoline and hydrogen. Hydrogen plants use steam, natural gas and catalyst to produce hydrogen. The Hydrocracker feeds gas oil and hydrogen over a catalyst to produce low sulfur high quality diesel and naphtha. The SZorb process uses hydrogen and sorbent to remove sulfur from gasoline. Hydrogen is both a feedstock and a product in the Aromatics area. Refinery fuel gas is a byproduct of the processes.

The Aromatics Area of the Wood River Refinery is equipped with 2 flares which are tall large diameter vertical pipes with a continuously maintained flame at the top. During non routine operation such as loss of electrical power or loss of cooling water, refinery units must release hydrocarbon vapor and hydrogen streams to the flare to prevent overpressure of operating equipment. The flares combust the released hydrocarbon vapor and hydrogen streams so that the volatile hydrocarbons and other pollutants are not released to atmosphere.

Historically, the continuous routing of some low volume low pressure hydrocarbon vapor and hydrogen streams to the flares has been permitted. Recovery and reprocessing of this material is not economical due to the low volume and low pressure of the streams and the high cost of recovery. These low volume streams contain some hydrogen sulfide (H2S) and ammonia (NH3) which produce SOx and NOx when combusted in the flare. Hydrocarbons in the streams are combusted in the flare to carbon dioxide, CO2.

Units served by the Aromatics North Flare include CR1, CR2/HDU1, CR3/HDU2, SZorb, DHT, HCU, ULD, and the Aromatics Maintenance Drop Out (MDO) system.

Section D - Pollution Control Facility Description

The Aromatics North Flare Gas Recovery Project installs pollution control equipment which reduces SOx, NOx, and CO2 emissions from the Aromatics North Flare.

This equipment captures low volume low pressure hydrocarbon vapor and hydrogen streams which are routed to the flare system, preventing this material from being combusted in the flare. This equipment will also recover hydrocarbon vapor and hydrogen streams released to the flare during non routine refinery operation. Recovery and reprocessing of these streams prevents the emission of SOx, NOx, and CO2 from the flare due to combustion of H2S, NH3, and hydrocarbon in the flare. With this pollution control equipment, H2S is recovered and eventually converted to sulfur, NH3 is recovered and eventually converted to nitrogen gas, and the hydrocarbon is recovered and eventually converted to product.

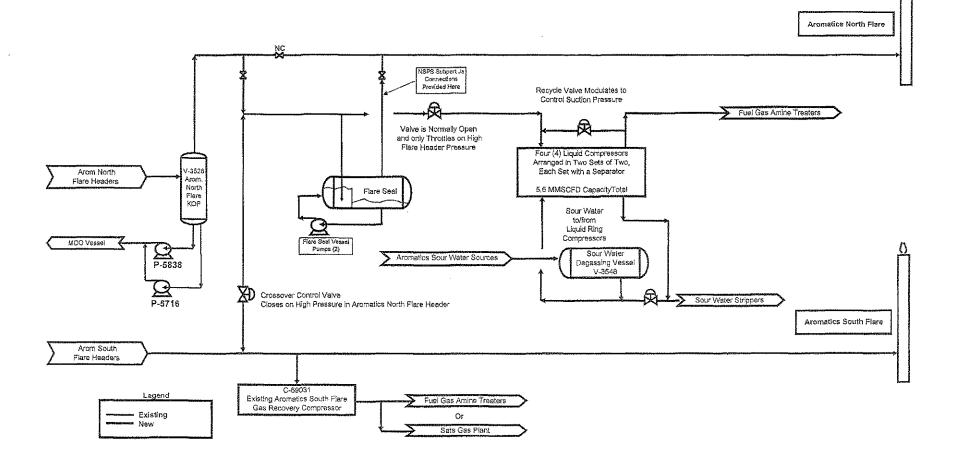
This pollution control equipment consists of a new seal drum (to maintain a slight backpressure on the flare piping network), liquid ring compressors, and a pressure control system to recover, compress, and send recovered gas to the fuel gas treating system. Thus, this project recovers

and treats hydrocarbon vapor and hydrogen streams that otherwise would be released to this flare. The gas recovered and sent to fuel gas treating instead of to the flare stack will reduce SOx, NOx, and CO2 emissions from the refinery. A seal drum and the pressure control system at the compressors will prevent air being inadvertently pulled into the flare system. A constant make up and purge of water is used in the liquid ring compressors. The purge water from the compressors will be sent to the Sour Water Stripper for further processing.

This project is installed for the sole purpose of reducing emissions to atmosphere due to flaring. This project will reduce SOx, NOx, and CO2 emissions to atmosphere. This project will reduce CO2 emissions to atmosphere by an estimated 16,000 metric tons/year.

The sulfur and hydrocarbon recovered by this pollution control facility does generate some revenue for the Wood River Refinery, but the costs to operate the pollution control facility are greater than this revenue and thus this pollution control facility results in no net income for the Wood River Refinery.

Attachment 1: Block Flow Diagram Aromatics North Flare Gas Recovery Project 6/14/2010



WRB Refining, LLC - Wood River Refinery Aromatics North Flare Gas Recovery Project - AFE Request

Electronic Filing - Received, Clerk's Office, 11/28/2011 **** PCB 12-082 **** 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-10-10-14W

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 North Flare Gas Recovery Project which reduces SO_x , NO_x , CO_2 emissions by preventing hydrocarbon vapors and hydrogen streams from being combusted in the flare. 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:psj

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