BEFORE THE ILLINOIS POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS

WRB Refining, LP)	
Selective Catalytic Reduction Unit)	
)	
)	PCB 23-
	ý	(Tax Certification - Air)
PROPERTY IDENTIFICATION NUMBER)	
19108350000001)	

NOTICE

TO: [Electronic filing] Don Brown, Clerk Illinois Pollution Control Board State of Illinois Center 100 W. Randolph Street, Suite 11-500 Chicago, Illinois 60601 [Service by mail] Bob Adair WRB Refining, LP 2331 CityWest Blvd. Houston, TX 77042

[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,

1st Robb H. Layman

Robb H. Layman Assistant Counsel

Date: September 23, 2022

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, LP Selective Catalytic Reduction Unit

PROPERTY IDENTIFICATION NUMBER 191083500000001

PCB 23-(Tax Certification - Air)

APPEARANCE

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

Protection Agency.

Respectfully submitted by,

- |s| Robb H. Qayman

Robb H. Layman Assistant Counsel

Date: September 23, 2022

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, LP Selective Catalytic Reduction Unit

PROPERTY IDENTIFICATION NUMBER 191083500000001

PCB 23-(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 December 27, 2021, the Illinois EPA received an application and supporting information from WRB Refining, LP, ("WRB Refining") concerning the proposed tax certification of certain equipment located at its Wood River Refinery located in Roxana, Madison County, Illinois. A copy of the application is attached hereto. [Exhibit A].

2. The applicant's contact information is as follows:

Bob Adair WRB Refining, LP 2331 CityWest Blvd. / Houston, TX 77042

3. The facility address is as follows:

WRB Refining, LP Wood River Refinery 900 South Central Ave. Roxana, IL 62084

4. The subject matter of this request involves the installation of a Selective Catalytic Reduction ("SCR") Unit at the Wood River Refinery. The unit employs a catalyst to convert nitrogen oxides ("NOX") emissions generated from the Hydrogen Plant Heaters into nitrogen and water. The unit abates NOx emissions generated because of the addition of a recent Hydrocrack Yield Optimization project, which increased the utilization of the Hydrogen Plant Heaters located within the existing Hydrocracker Unit in the Aromatics area of the refinery. *See*, **Exhibit A**, page 2 of 3; *see also*, Attachment 1 and 2. The installation of the unit will reduce NOx emissions from the flue gas streams of the Hydrogen Plant Heaters by an estimated fifty percent (50%), thus reducing or preventing emissions that would otherwise be emitted to the atmosphere from refinery operations. *Id*. The installation of the equipment assures that the facility will meet its legal obligations to comply with Standards of Performance of certain Petroleum Refineries under the U.S. Environmental Protection Agency's New Source Performance Standards ("NSPS") found at 40 CFR Part 60, Subpart Ja, at Section 60.102a(g)(2)(i) and related permit conditions. *Id.*, page 2 of 3.

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 primary purpose of the SCR Unit to reduce NOx emissions from the increased utilization of the Hydrogen Plant Heaters and to comply with applicable air pollution standards, it is the Illinois EPA's engineering judgment that the unit and related appurtenances 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 information in the application for the SCR Unit satisfies the aforementioned statutory and regulatory 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: September 23, 2022

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 23rd day of September 2022, I electronically filed the

following instruments entitled NOTICE, APPEARANCE and RECOMMENDATION with:

Don Brown, 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 Bob Adar WRB Refining, LP 2331 CityWest Blvd. Houston, TX 77042

1st Robb H. Qayman

Robb H. Layman Assistant Counsel

Bob Adair Principal Advisor Real Estate Services

PHILLIPS 66 2331 CityWest Blvd. Houston, TX 77042 BTATE OF ILLINOIS DEC 27 2021



Environmental Protection Agency BUREAU OF AIR

December 16, 2021

Illinois EPA Attention: William D. Marr, Permit Section Bureau of Air 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794-9276

Dear Mr. Marr:

Enclosed is one application for certification (property tax treatment) of pollution control facilities. We appreciate you and your section processing this application.

Please feel free to call me to discuss.

Respectfully,

B. G. Adair

Enclosures

- Attachment A



Illinois Environmental Protection Agency

1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276 • (217) 782-3397

Application for Certification (Property Tax Treatment) Pollution Control Facility

		For Agency Use Only		
	File Number:		Date Rec'd:	
Facility Type (check one): 🕢 Air 🛛 🔿 Water	Certification Nu	umber:	Date:	
This form is to be used for any application for certification of EPA. Separate applications must be completed for each p- listed below. Do not mix types (air and water). Where both	ollution control faci	lity claimed. Send the applic	ation only to the appropriate address	
If attachments are needed, record them consecutively on a	an index sheet.			
Note: This form should be completed within Acrobat before	e being saved, prir	ted, signed, and submitted.		
Air: Illinois EPA Attention: William D. Marr, Permit Section Bureau of Air 1021 North Grand Avenue East, P.O. Box 19 Springfield, IL 62794-9276		er: Illinois EPA Attention: Darin LeCrone Bureau of Water 1021 North Grand Avenu Springfield, IL 62794-92	ue East, P.O. Box 19276	
I. Applicant Information Company Name: WRB Refining LP		22 (34		
Person Authorized to Receive Certifica Name: Bob Adair	tion	Person to Conta Name: Juan Li	act for Additional Information	
Street Addr: 2331 CityWest Blvd.	Str	eet Addr: 900 S. Central /	Ave.	
City: Houston S	tate: TX	City: Roxana	State: IL	
ZIP: 77042 Phone: (832) 765-141	9	ZIP: 62084	Phone: (618) 255-2981	
Email: Bob.Adair@p66.com		Email: Juan.Li@p66.co	om	
II. Facility Information				
	wnship:	Range:		
Municipality: Roxana	10 Mar	Wood River		
Note: A plat map location is requested for facilities lo		the second s		
Address: 900 S. Central Ave.		City: Roxana		
State: IL Zip Code: 62084 Count	ty:Madison	,Book Num	ber:	
Property Index Number: 191083500000001 Note: The Property Index Number is the numerical reference used to				
	identify a	parcel of real property for a	ssessment and taxation purposes.	
Manufacturing Operations Information				
Nature of Operations Conducted at the Above Locati	on			
Petroleum Refining		· · · · · · · · · · · · · · · · · · ·		
Permit Information				
WPC Construction Permit Number: not applicat	ole	Date Issued:		
NPDES Permit Number: not applica	ole	Date Issued:	Exp. Date:	
APC Construction Permit Number: 19090031		Date Issued: Dec 10, 20	19	
APC Operating Permit Number: 95120306		Date Issued: Nov 7, 200		
Note: Submit copies of all relevant permits issued by	sector and the sector and the sector of the			
This Agency is authorized to request this information under 415 IL failure to provide the information. However, the absence of the information.	CS 5/4(b)(2012). Dis prmation could prove	closure of this information is voi nt your application from being p	luntary and no penalties will result from the rocessed or could result in denial of your	

Manufacturing Process Information

Please provide information on the manufacturing process and materials on which pollution control facility is used, including each major piece of equipment associated with the pollution control facility (or low sulfur dioxide emission coal fueled device).

Description of the Process

The Hydrocracker Unit (HCU) is a process unit in the Aromatics area of the Wood River Refinery. The HCU converts gas oils to diesel and lighter products by reacting with hydrogen at elevated pressure and temperature in the presence of a catalyst. The hydrogen for this reaction is supplied from several refinery sources, with the majority coming from the refinery hydrogen plants. The Hydrocrack Yield Optimization (HYO) project demands increased hydrogen flow to the HCU thus require the Hydrogen Plants to increase hydrogen production. Please see Attachments 1 (narrative) and 2 (simplified flow diagram).

Materials Used in the Process

Light gas oil, fuel gas, catalyst, hydrogen, steam, water. The refinery's Hydrogen Plants produce and provide hydrogen to the Hydrocracker unit. Please see Attachment 1.

Pollution Control Facility Information

Please provide a narrative description of the pollution control facility (or low sulfur dioxide emission coal fueled device), and an explanation of why its primary purpose is to eliminate, prevent or reduce pollution. State the type of control facility, as well as a narrative description and a process flow diagram describing the pollution control facility. Include an average analysis of the influent and effluent of the control facility stating the collection efficiency, if applicable.

Describe the Pollution Control Facility (or Low Sulfur Dioxide Emission Coal Fueled Device).

A Selective Catalyst Reduction (SCR) unit will be installed to abate nitrogen oxides (NOx) emissions from the Hydrogen Plant heaters, which will increase utilization as a result of the Hydrocrack Yield Optimization project. Through the SCR, NOx are converted to nitrogen (N2) and water (H2O). The project is designed for at least 50% NOx reduction as stipulated in the minor permit. A simplified flow diagram is in Attachment 2 to this application.

Describe the Primary Purpose of the Pollution Control Facility (or Low Sulfur Dioxide Emission Coal Fueled Device). The primary purpose of this Pollution Control Facility is to abate NOx emissions from Hydrogen Plant reformer heaters. Please see Attachment 1.

Identify the statute or regulation (federal or state), or local ordinance, if any, requiring the installation of the subject pollution control facility (or low sulfur dioxide emission coal fueled device).

40 CFR Subpart Ja, Section 60.102a(g)(2)(i); Permit Condition 19090031 Part 1.1.e. and 2.1.3.a.ii

Nature of Contaminants or Pollutants

List air contaminants or water pollution substances released as effluents to the manufacturing processes. Also list the final disposal of any contaminants removed from the manufacturing processes.

Material Retained, Captured or Recovered			
Contaminant or Pollutant	Description	Disposal or Use	
Gases containing	Selective catalytic reduction (SCR)	Reduce NOx emissions to the air.	
nitrogen oxides (NOx) to abate NOx	Catalyst is regenerated periodically.		
		If the catalyst is changed out, the spent catalyst will be	
		disposed of properly.	

Note: Contaminant or pollutant means that which is removed from the process by the pollution control facility.

Point(s) of Waste Water Discharge

Identify the location of the discharge to the receiving stream. This will typically refer to a source of water pollution but can include water-carried wastes from air pollution control facilities.

Plans and Specifications Attached: O Yes (No

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.

Are contaminants (or residues) collected by the control facility? @ Yes ONo

Note: If the collected contaminants are disposed of other than as wastes, state the disposition of the materials, and the value dollars reclaimed by the sale or reuse of the collected substances. State the cost of reclamation and related expense.

Project Status

Date Installation Completed:

Provide the date the pollution control facility was first placed into service and operated. If not, explain. The Hydrogen Plant SCR is planned to be in service in April 2022.

Status of installation on date of application

The SCR has been installed and tested. The SCR is planned to be in service in April 2022.

III. Verification and Signature

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.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

For incorporated entities, signature should be from an authorized corporate representative.

B. G. Adair Printed Name

Principal Advisor, Real Estate Services

Title

12/16/2021

Signature

Attachment 1 Application for Certification (Property Tax Treatment) Pollution Control Facility WRB Refining LP Wood River Refinery, Madison County, IL

Selective Catalyst Reduction Units in Hydrocracker Yield Optimization Project

Facility Information:

Manufacturing Process Information:

Description of the Process:

The Hydrocracker Unit (HCU) is a process unit in the Aromatics area of the Wood River Refinery. The HCU converts gas oils to diesel and lighter products by reacting with hydrogen at elevated pressure and temperature in the presence of a catalyst. The hydrogen for this reaction is supplied from several refinery sources, with the majority coming from the refinery hydrogen plants.

The Hydrocracker Yield Optimization (HYO) project adds catalyst volume in the form of two new large reactors, which allows heavier, more hydrogen-deficient gas oils to be processed in the unit while still retaining acceptable catalyst life. The reaction with this heavier feed consumes more hydrogen. To achieve this increased hydrogen flow to HCU, the refinery hydrogen plants will need to increase production, thus driving up NOx emissions. The project has installed Selective Catalyst Reduction (SCR) units in the flue gas ducts in both Hydrogen Plant #1 (HP1) and Hydrogen Plant #2 (HP2) to mitigate NOx emissions.

Materials Used in the Process:

Light gas oil, fuel gas, catalyst, hydrogen, steam, water. The refinery's Hydrogen Plants produce and provide hydrogen to the Hydrocracker unit.

Pollution Control Facility Information:

Pollution Control Facility Description

The project, which includes two new reactors, a filtration unit, two new booster pumps, a new HCU fractionator Bottoms pump, a new HCU High Pressure Separator, a new flare stack, a new flare Kock Out Drum and pumps, a revamped hydrogen recycle compressor, new piping, and increased utilization of existing process units (such as Fluid Catalytic Cracking Units (FCC's), Hydrogen Plants), enables the HCU to run heavier, more hydrogen-deficient feeds, increasing clean product yield in both the FCC's and HCU. The installation of SCRs in the flue gas ducts of both HP1 and HP2 reduces NOx emissions significantly, the project is designed for at least 50% NOx reduction as stipulated in the minor permit.

Primary Purpose of the Pollution Control Facility

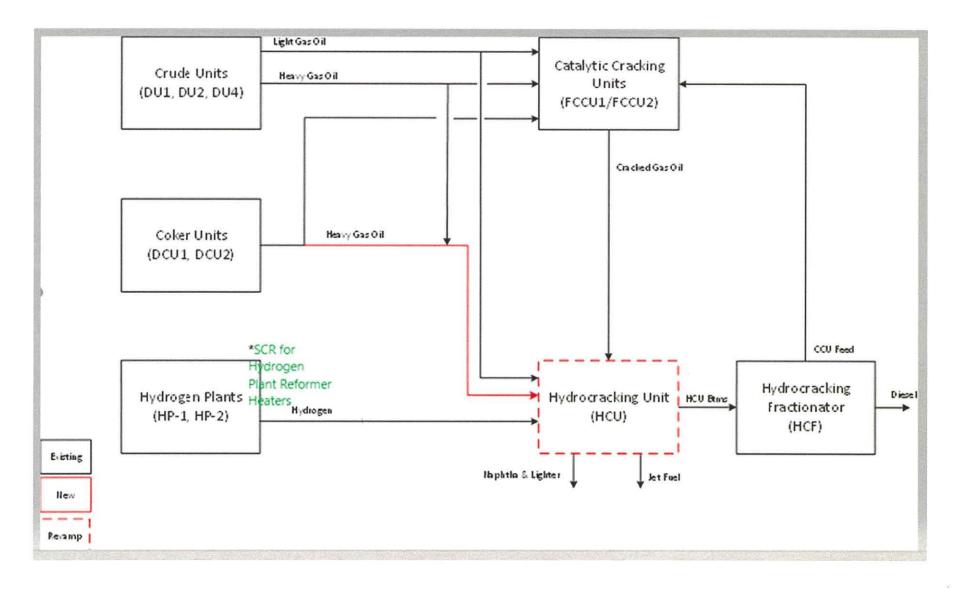
The primary purpose of the SCR-portion of the project is to reduce NOx emissions from the Hydrogen Plants (HP1 and HP2).

<u>Statue or Regulation Requiring Installation of the Pollution Control Facility</u> 40 CFR Subpart Ja, Section 60.102a(g)(2)(i) Illinois Environmental Protection Agency Permit I.D. 19090031 Part 1.1.e. and 2.1.3.a.ii, issued on December 10, 2019

Simplified Process Flow Diagram

See Attached 2.

Attachment 2 Simplified Process Flow Diagram Selective Catalytic Reduction in the Hydrocracker Unit WRB Refining LP Wood River Refinery, Madison County, IL





ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217)782-3397 JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

Memorandum Technical Recommendation for Tax Certification Approval

Date: September 23, 2022

To: Robb H. Layman, Assistant Counsel, Division of Legal Counsel

From: Bill Marr, Manager, Permits Section WOM

Subject: WRB Refining, LP

The Illinois EPA received a request on December 27, 2021, from WRB Refining, LP, for a recommendation regarding tax certification of air pollution control facilities pursuant to 35 Ill. Adm. Code 125.204. The application seeks certification for a Selective Catalytic Reduction Unit that will reduce emissions of nitrogen oxides ("NOx") from refinery processes. Based on consultations with my staff, the following recommendation for the Pollution Control Board's approval is made:

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

- Selective Catalytic Reduction Unit, which will remove or prevent NOx emissions from the flue gas streams from two Hydrogen Plant Heaters within the Hydrocracker Unit of the Aromatics area of the Wood River Refinery, and therefore reduce emissions that would otherwise be emitted from refinery processes and assure compliance with
- applicable federal New Source Performance Standards. Because these processes are part of a system, construction or device whose primary purpose is to reduce or prevent air pollution, they may be considered as "pollution control facilities."

This facility is located at 900 South Central Avenue, Roxana, Madison County, Illinois. The property identification number is Part of 191083500000001.

Based on the information included in this submittal, it is my engineering judgment 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 is therefore eligible for tax certification from the Illinois Pollution Control Board. Therefore, this memorandum recommends that the Board issue the requested tax certification for this facility.

Rockford • 4302 N. Main St., Rockford, IL 61103 • (815) 987-7760 Elgin • 595 S. State, Elgin, IL 60123 • (847) 608-3131 Champaign • 2125 S. First St., Champaign, IL 61820 • (217) 278-5800 Collinsville • 1101 Eastport Plaza Dr, Suite 100, Collinsville, IL 62234 • (618) 346-5120

Des Plaines • 9511 Harrison St., Des Plaines, IL 60016 • (847) 294-4000 Peoria • 412 SW Washington St, Suite D., Peoria, IL 61602 • (309) 671-3022 Marion • 2309 W. Main St., Suite 116, Marion, IL 62959 • (618) 993-7200

- Attachment B