BEFORE THE ILLINOIS POLLUTION CONTROL BOARD OF THE STATE OF ILLINOIS

| WRB REFINING, LLC |) | |
|--|---|---------------------------|
| Ultralow Sulfur Diesel Hydrotreater |) | |
| |) | |
| |) | 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] 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,

<u> 1st Robb H. Layman</u> Robb H. Layman

Assistant Counsel

Date: August 25, 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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| 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,

1st Robb H. Layman

Robb H. Layman Assistant Counsel

Date: August 25, 2011

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY 1021 North Grand Avenue East P.O. Box 19276
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| 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 consists of the Ultralow Sulfur Diesel Hydrotreater, which was implemented by the refinery as part of the Ultralow Sulfur Diesel project to reduce plant-wide emissions of sulfur oxides ("Sox"), nitrogen dioxides ("NOx") and particulate matter associated with the refining of diesel pool sold to consumers. As described in the application, the Ultralow Sulfur Diesel Hydrotreater is a new unit combined from two existing hydrocracker unit reactors and related existing equipment with new equipment, piping and controls. The hydrotreater unit employs hydrogen, a fixed bed catalyst, high pressure and high temperatures to remove sulfur compounds from various product streams (i.e., straight run, fluid cat cracker and coker light gasoil). The high-pressured reaction from the catalyst to the hydrogen-treated product streams removes the sulfur from the product, converting it to hydrogen sulfide. The Ultralow Sulfur Diesel Hydrotreater allows the refinery to comply with the United States' Environmental Protection Agency's diesel fuel content requirements, which were established at roughly less than 15 parts per million by weight. In doing so, the new hydrotreater unit ultimately prevents or reduces SOx emissions from the diesel pool supplied to consumers for use in automobiles and other diesel-powered engines. Secondarily, the improved quality of low sulfur diesel products allows consumers to make use of more advanced emission control systems for diesel engines, which can result in reductions of NOx and particulate matter emissions.
- 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 6.

35 ILCS 200/11-5 (2002).

7. Based on information in the application and the underlying purpose of the

Ultralow Sulfur Diesel Hydrotreater 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 Ultralow Sulfur

Diesel Hydrotreater 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: August 25, 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 25th day of August, 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

<u>/s/ *Robb H. Layman*</u> Robb H. Layman

Assistant Counsel

Electronic Filing - Received, Clerk's Office, 08/25/2011

APPLICATION FOR CERTIFICATION (PROPERTY TAX TREATMENT)
POLLUTION CONTROL FACILITY
AIR ☑ WATER □

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.

| | FÖR AGENCY ÜSE | | | phreaton for commeanon. | |
|---|--|-------------------|----------------------------------|---------------------------|--|
| | | | | | |
| File No. | Date Received | Certification No. | | Date | |
| Sec. A | Company Name | | · - · | | |
| | WRB Refining LLC Person Authorized to Receive Certification | | Doronn to Conto | ct for Additional Details | |
| | Michael Kemp | | Gordon Terhun | | |
| | Street Address | | Street Address | | |
| | 404 Phillips Building | | 900 S. Central Ave., P.O. Box 76 | | |
| - | Municipality, State & Zip Code | | Municipality, State & Zip Code | | |
| APPLICANT | Bartlesville, OK 74004 | | Roxana, IL 62084 | | |
| PLIC | Telephone Number | | Telephone Number | | |
| AP | (918) 661-9055 | | (618) 255-2876 | | |
| | Location of Facility Quarter Section Township | Dange | Municipality | Township | |
| | Quarter Section Township | Range | | | |
| | Street Address | | County | Book Number | |
| | 900 S. Central Ave. | | Madison | | |
| | Property Identification Number | | Parcel Number | 202.224 | |
| 0 0 | L Net on 10 and | f t' | 19-1-08-35-00- | 000-001 | |
| Sec. B | Nature of Operations Conducted at the Above | e rocation | | | |
| | Petroleum Refining | | | | |
| | | | | | |
| ဋ | | | | | |
| N ON O | Water Pollution Control Construction Permit I | No. | Date Issued | | |
| MANUFACTURING OPERATIONS | | | | | |
| IUF/ | NPDES PERMIT No. | | Date Issued | Expiration Date | |
| A A N | IL0000205 | | 04/14/04 | 04/14/09 | |
| | Air Pollution Control Construction Permit No. | | Date Issued | | |
| | 04050026 | | 06/11/07 | | |
| | Air Pollution Control Operating Permit No. | | Date Issued | | |
| | 95120306 | | 11/07/03 | | |
| Sec. C | Describe Unit Process | | | | |
| | See Ultralow Sulfur Diesel Hydrotreater P | roject Attachm | ent. | | |
| ပ္ခ | | | | | |
| 8 S | | | | | |
| MANUFACTURING PROCESS | Materials Used in Process | | | | |
| UF.A | See Ultralow Sulfur Diesel Hydrotreater Project Attachment. | | | | |
| NAN H | See Oltraiow Sulfur Diesel Hydrotreater P | roject Attacrim | ent. | | |
| | 2 | | | | |
| | | | | | |
| 05 | L Daniel Control Contr | | | | |
| Sec. D | Describe Pollution Abatement Control Facility | | | | |
| ON ON | See Ultralow Sulfur Diesel Hydrotreater P | roject Attachm | ent. | | |
| NTR IF 418 | | | | | |
| 00 808 | | | | | |
| TION 7 DE | | | | | |
| POLLUTION CONTROL FACILITY DESCRIPTION | | | | | |
| FAC | | | | | |
| | | | | | |

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

Page 1 of 2

8/00

Fach. 5 7+ A

| Sec. E. | (1) Natu | ure of Contaminants or Poliutants | | | | | |
|--|---|---|--|--|----------------------------|----------------|--|
| | (1) Mature of Contaminants of Foliatants | | | | | | |
| S | | | | Material Retained, Captured or Recovered | | | |
| , TS | | inant or Pollutant | DESCRIPTION | | DISPOSAL OR | | |
| | Sulturo | kides (SOx) | Hydrogen Sulfide | | d and converted | i to solid | |
| NTA | Nitroger | Oxides (NOx) | Nitrogen Gas | elemental | | | |
| 58 | Particula | | Particulates | N2 not converted to NOx Trapped or converted by new conv | | new control | |
| ======================================= | , 41110010 | | , artioarateo | Tiapped C | converted by | iew control | |
| FA | (2) Poir | it(s) of Waste Water Discharge | | | | | |
| 7301 | | | | | | | |
| NO 1 | | | Plans and Specifications | Attached | Yes 🗆 | No 図 | |
| Ŏ Z | | re contaminants (or residues) co | · · · · · · · · · · · · · · · · · · · | | Yes 🗵 | No 🗆 | |
| 510 | (4) D | ate installation completed 04/04 | /06 status of installation o | n date of a | | | |
| OLL(ATA | (5) a | TOTAL INSTALLED COST | | | \$ 199,688,000 | 0.00 | |
| P. | b | NET SALVAGE VALUE IF CONS | SIDERED REAL PROPERTY: | | \$ 1,797,192.0 | 0 | |
| N. T. | C. | PRODUCTIVE GROSS ANNUAL | INCOME OF CONTROL FACILITY: | | \$ 0.00 | | |
| POLLUTION CONTROL FACILITY – ACCOUNTING DATA CONTROL | d | PRODUCTIVE NET ANNUAL IN | COME OF CONTROL FACILITY: | | \$ 0.00 | | |
| AC | е | . PERCENTAGE CONTROL FACI | LITY BEARS TO WHOLE FACILITY | VALUE: | % To Be Dete | mined | |
| Sec. F | | | ordance with the Illinois Property Tax | | nended, and to th | e best of my | |
| Id | | | s claimed herein are "pollution control | facilities" as | defined in Section | n 11-10 of the | |
| SIGNATURE | Illinois P | roperty Tax Code. | | | | | |
| NA L | V | on Columb | DIRECTOR- PTRRC | | | | |
| SIG | | Same Constant | | <u>-</u> | | | |
| Sec. G | Signatu | · · · · · · · · · · · · · · · · · · · | Title TONS FOR COMPILING AND FILING APP | UCATION | | | |
| JC0. O | | | | | | | |
| í | | erations are related, file two applications. | ted for each control facility claimed. Do not If attachments are needed, record them of | consecutively | on an index sheet. | | |
| | Sec. 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 pollution control facility. Include a listing of each major piece of equipment included in the claimed fair cash value for real property. Include an average 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 | Sec. F Self-explanatory. Signature must be a corporate authorized signature. | | | | | |
| | | Submit to: | Attention: | Attention: | | | |
| | | Illinois EPA | Al Keller | Donald E. St | | | |
| | | P.O. Box 19276 Springfield, IL 62794-9276 | Permit Section Division of Water Pollution Control | Permit Section Division of A | on ir Pollution Control | | |

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

Project: Ultralow Sulfur Diesel Hydrotreater

Section C - Manufacturing Process

Process Description:

The Wood River Refinery implemented the Ultralow Sulfur Diesel (ULSD) Project to reduce the emission of sulfur oxides (SOx), nitrogen oxides (NOx), and particulate pollutants due to consumer use of the diesel product.

This ULSD Project allows the refinery to produce diesel with at most 15 parts per million (ppm) sulfur which is much lower than the previous diesel sulfur content of 500 ppm. The production of ULSD not only reduces emissions of sulfur compounds (a cause of acid rain), but also allows diesel engines to be fitted with advanced emission control systems that would otherwise be poisoned by these compounds. These emission control systems can greatly reduce emissions of oxides of nitrogen and particulate matter.

The Wood River ULSD Project was managed as three separate sub-projects, all of which are necessary to achieve Ultralow Sulfur Diesel in compliance with US EPA standards: (1) the HCU Revamp which simplified the Hydrocracker Unit (HCU) and made two HCU reactors and several other pieces of HCU equipment available for use as part of the ULSD Hydrotreater, (2) the ULD Project which combined the two former HCU reactors and other former HCU equipment with new equipment, piping, and controls to create the Ultralow Sulfur Hydrotreater Unit (ULD) and (3) a new Hydrogen Plant (HP-1) to produce the hydrogen necessary for operation of the Ultralow Sulfur Hydrotreater Unit.

The ULD unit uses hydrogen, fixed bed hydrotreating catalyst, high pressure, and elevated temperature to remove sulfur from straight run, fluid cat cracker (FCC), and coker light gasoil streams. The combined light gasoil feed stream is mixed with hydrogen, heated, and sent to the two high pressure reactors. In the reactors, the gasoil contacts fixed bed hydrotreating catalyst which removes the sulfur from the gasoil and converts it to H2S. The reactor effluent is cooled via heat recovery exchangers and routed to a recovery/stabilization section where light material is recovered and sent to the Saturates Gas Plant for further processing. The stabilized ultralow sulfur diesel is routed to storage. A simplified process flow diagram for the ULD unit is attached.

The production of ULSD to meet the EPA mandate required a significant increase in hydrogen consumption at the Wood River Refinery. Production of this hydrogen required Wood River Refinery to construct a new Hydrogen Plant, HP-1. HP-1 uses steam, natural gas, fixed bed catalysts, elevated pressure, and high temperatures to produce high purity hydrogen to meet the additional hydrogen demand caused by the construction of ULSD hydrotreater.

Materials Used in Process: High sulfur gasoil Hydrogen Catalysts Steam Fuel Gas

Section D - Pollution Control Facility Description

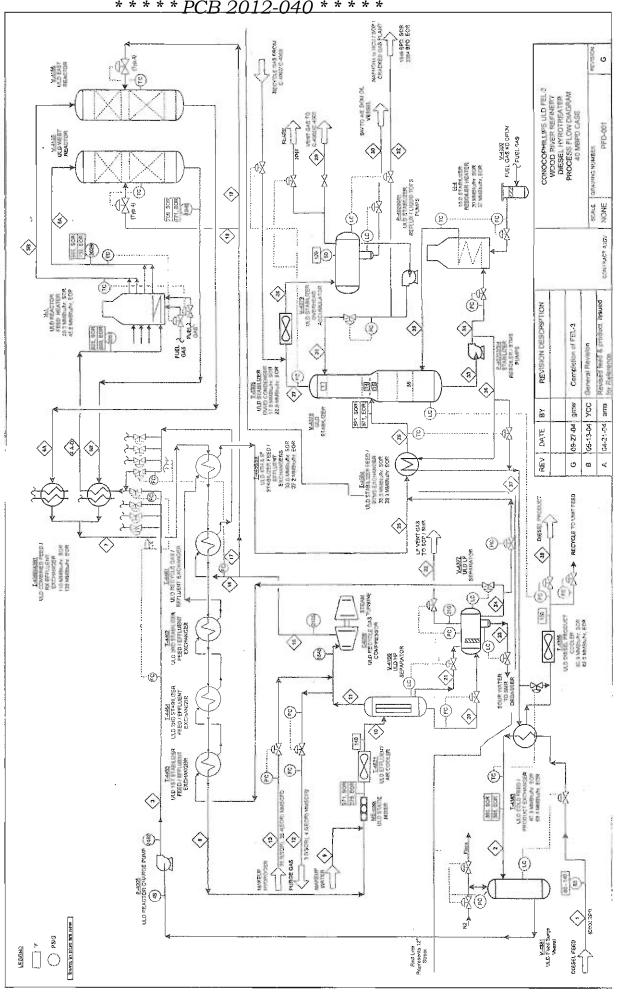
If the emission of SOx pollution was not a concern, the diesel streams produced by the Wood River Refinery could and would be blended and sold as high valued diesel. However, SOx pollution is a significant concern and thus the Wood River Refinery installed the ULSD facilities to remove sulfur from diesel streams so that this material could be used as diesel with extremely low emission of SOx pollution. The ULSD pollution control facility directly prevents the emission to the atmosphere of approximately 2,000 tons per year of SOx.

This project also enables the refinery to meet US EPA requirements that diesel sulfur content is less than 15 parts per million by weight (ppmw). The ultralow sulfur diesel reduces emissions of sulfur compounds (a cause of acid rain) and also allows diesel engines to be fitted with advanced emission control systems that would otherwise be poisoned by sulfur. Thus, ultralow sulfur diesel is a necessary and integral part of the diesel pollution reduction system, allowing advanced emission control systems which can greatly reduce emissions of oxides of nitrogen and particulate matter.

Thus, the Wood River ULSD project provides pollution control in two ways. First, the project directly reduces SOx pollution by removing sulfur from the diesel product. Second, the project provides the diesel quality necessary for reducing emissions of oxides of nitrogen and particulate matter through the use of advanced emission control systems in diesel engines.

The sulfur 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

In summary, the Wood River Refinery Ultralow Sulfur Diesel (ULSD) Project was implemented solely to reduce SOx, NOx, and particulate pollution.



Electronic Filing - Received, Clerk's Office, 08/25/2011 ***ILLARGE 2012 OFFICE PROTECTION AGENCY



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

PAT QUINN, GOVERNOR

MEMORANDUM

Technical Recommendation for Tax Certification Approval

Date:

May 13, 2011

To:

Robb Layman

From:

Edwin C. Bakowski

Subject:

WRB Refining, LLC. TC-10-10-14S

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:

Ultralow Sulfur Diesel Hydroticater Project which reduces SO₄, NO₅, PM emissions by allowing diesel engines to be fitted with advanced emission control systems. 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, Illinois 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 125.200.2., 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

