

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

WRB REFINING, LLC)	
Ultralow Sulfur Diesel Expansion 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,

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

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Ultralow Sulfur Diesel Expansion Project)	
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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 an upgrade to the Ultralow Sulfur Diesel ("ULSD") operations at the refinery. As described in the application, the project consists of the following: 1) the expansion of the existing ULSD Hydrotreater, including the construction of a new vent gas compressor for reducing the loss of hydrocarbons to the flare system; 2) conversion of an idled Cat Feed Hydrotreater to a new ULSD Hydrotreater to produce ULSD; 3) modifications to the Hydrocracker Unit to allow it to hydrotreat high sulfur diesel streams to produce ULSD; and 4) installation of a diesel recovery column to recover ULSD from other product streams from the Hydrocracker; 5) installation of a new hydrogen plant to supply the need the additional hydrogen for the hydrotreating process.

5. The ULSD Expansion Project allows the refinery to continue 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 project ultimately enables the company to prevent or reduces emissions of sulfur oxides from the diesel pool supplied to consumers for use in automobiles and other diesel-powered engines. Secondly, 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 lower emissions of nitrogen oxides and particulate matter.

6. 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."

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

8. Based on information in the application and the underlying purpose of the ULSD Expansion 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]**.

9. Because the substantive components of the application for the ULSD Expansion Project 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 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

/s/ Robb H. Layman

Robb H. Layman
Assistant Counsel

***** PCB 12-075 *****

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

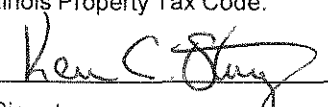
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 P. O. Box 19276, Springfield, IL 62794-9276

This Agency is authorized to request this information under Illinois Revised Statutes, 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 USE

File No.	Date Received	Certification No.	Date	
Sec. A APPLICANT	Company Name WRB Refining LLC			
	Person Authorized to Receive Certification Michael Kemp		Person to Contact for Additional Details Gordon Terhune	
	Street Address 404 Phillips Building		Street Address 900 S. Central Ave., P.O. Box 76	
	Municipality, State & Zip Code Bartlesville, OK 74004		Municipality, State & Zip Code Roxana, IL 62084	
	Telephone Number (918) 661-9055		Telephone Number (618) 255-2876	
	Location of Facility Quarter Section	Township	Range	Municipality Township
	Street Address 900 S. Central Ave.		County Madison	Book Number
	Property Identification Number		Parcel Number 19-1-08-35-00-000-001	
	Sec. B MANUFACTURING OPERATIONS	Nature of Operations Conducted at the Above Location Petroleum Refining		
Water Pollution Control Construction Permit No.		Date Issued		
NPDES PERMIT No. IL0000205		Date Issued 04/14/04	Expiration Date 04/14/09	
Air Pollution Control Construction Permit No. 06050052		Date Issued 08/05/08		
Air Pollution Control Operating Permit No. 95120306		Date Issued 11/07/03		
Sec. C MANUFACTURING PROCESS	Describe Unit Process See Ultralow Sulfur Diesel Expansion Project Attachment.			
	Materials Used in Process See Ultralow Sulfur Diesel Expansion Project Attachment.			
Sec. D POLLUTION CONTROL FACILITY DESCRIPTION	Describe Pollution Abatement Control Facility See Ultralow Sulfur Diesel Expansion Project Attachment.			

Exhibit A

Sec. E	(1) Nature of Contaminants or Pollutants			
			Material Retained, Captured or Recovered	
		DESCRIPTION	DISPOSAL OR USE	
	Contaminant or Pollutant			
	Sulfur oxides (SOx)	Hydrogen Sulfide	Recovered and converted to solid elemental sulfur.	
	Nitrogen Oxides (NOx)	Nitrogen Gas	N2 not converted to NOx	
	Particulates	Particulates	Trapped or converted by new control	
	(2) Point(s) of Waste Water Discharge			
	Plans and Specifications Attached		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
	(3)	Are contaminants (or residues) collected by the control facility?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
(4)	Date installation completed <u>04/01/12</u> status of installation on date of application <u>92%</u>			
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	TITLE		
		<u>DIRECTOR - PTRRC</u>		
	Signature	Title		
Sec. G	INSTRUCTIONS FOR COMPILING AND FILING APPLICATION			
	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	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.		
	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 P.O. Box 19276 Springfield, IL 62794-9276	Al Keller Permit Section Division of Water Pollution Control	Donald E. Sutton Permit Section Division of Air Pollution Control

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

Project: Ultralow Sulfur Diesel Expansion Project

Section C – Manufacturing Process

Process Description:

As the Wood River Refinery expanded, the Ultralow Sulfur Diesel (ULSD) Expansion Project was implemented to prevent the emission of sulfur oxides (SOx) pollutants due to consumer use of the diesel product.

This project enables the refinery to continue to meet the US EPA mandate that refiners reduce the sulfur content in diesel to 15 ppm. The allowable sulfur content for ULSD (15 ppm) is much lower than the previous U.S. on-highway standard for low sulfur diesel (LSD, 500 ppm), which 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. Together, ultralow sulfur diesel and advanced emission control systems can greatly reduce emissions of oxides of nitrogen and particulate matter.

The Wood River ULSD Expansion Project was managed as four separate sub-projects: (1) the expansion of the existing ULD Hydrotreater including installation of a vent gas compressor to reduce loss of light hydrocarbon gases to the flare (2) conversion of an idled Cat Feed Hydrotreater to an Ultralow Sulfur Diesel Hydrotreater Unit (ULD-2) to produce ULSD (3) revisions to the Hydrocracker (HCU) so that it could hydrotreat high sulfur diesel streams and produce ULSD and (4) installation of a diesel recovery column (the HCU Flasher or HCF) to recover ULSD from other HCU products. Hydrotreating diesel streams to produce ULSD requires a substantial volume of hydrogen. The additional hydrogen required by the ULSD Expansion Project was supplied via the installation of a new hydrogen plant, HP-2.

The ULD and ULD2 units use hydrogen, fixed bed hydrotreating catalyst, high pressure, and elevated temperature to remove sulfur from high sulfur diesel streams such as straight run, Fluid Cat Cracker (FCC), and coker light gasoil streams. The ULD or ULD2 feed stream is mixed with hydrogen, heated, and sent to the high pressure reactor. In the reactor, the feed stream contacts fixed bed hydrotreating catalyst which removes the sulfur from the feed 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. The H₂S generated by the reactors is recovered and routed to the Sulfur Plant where it is converted to elemental sulfur. The stabilized ultralow sulfur diesel is routed to storage. Simplified process flow diagrams for the ULD and ULD2 units are attached.

The Hydrocracker (HCU) use hydrogen, fixed bed hydrotreating and hydrocracking catalysts, high pressure, and elevated temperature to remove sulfur and nitrogen and to hydrocrack high sulfur and high nitrogen streams such as light and heavy gasoil streams. The HCU products are extremely low in sulfur and nitrogen and high in hydrogen, making HCU products some of the cleanest burning transportation fuels. Recent advances in hydrocracking catalyst significantly increase the HCU ability to produce ULSD. As part of the Wood River ULSD Expansion Project, the HCU was revised so that it could hydrotreat high sulfur diesel streams and produce ULSD. This ULSD is recovered from other HCU products in a diesel recovery column called the HCU Flasher or HCF. The H₂S removed from the diesel feed streams is recovered and routed to the Sulfur Plant where it is converted to elemental sulfur. The HCU produced ultralow sulfur diesel is routed to storage. A simplified process flow diagram of the HCF Diesel Recovery column is attached.

Materials Used in Process:

High sulfur gasoil

Hydrogen

Catalysts

Steam

Fuel Gas

Section D – Pollution Control Facility Description

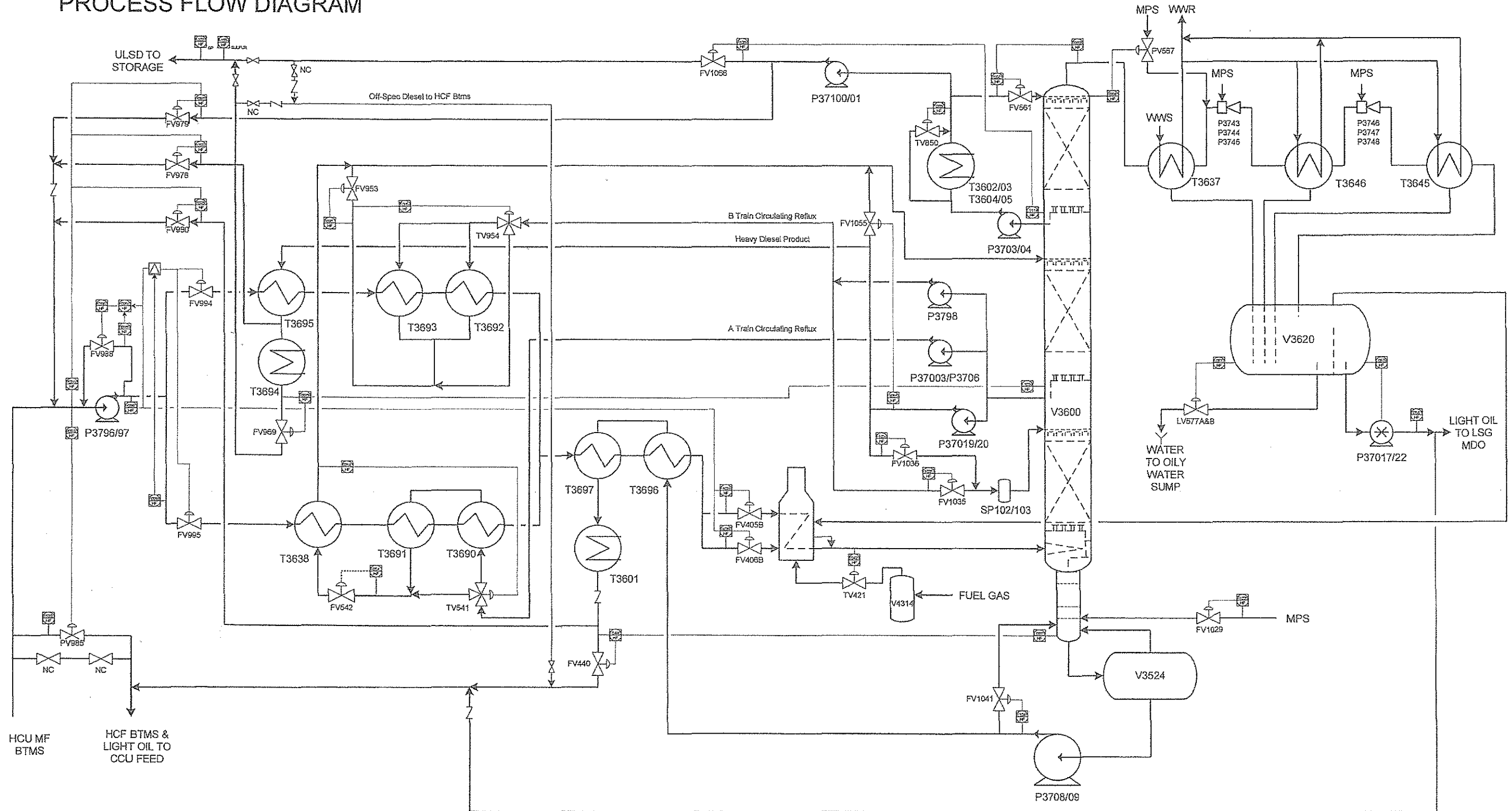
If the emission of SOx pollution was not a concern, the additional diesel produced by the Wood River Refinery could and would be blended directly with other diesel components and sold as high valued diesel. However, SOx pollution is a significant concern and thus the Wood River Refinery expanded the ULSD facilities to remove sulfur from diesel streams so that this material could be used as diesel without the emission of SOx pollution. The ULSD expansion directly prevents the emission to the atmosphere of approximately 120 metric tons per day of SOx.

This project also enables the refinery to continue 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 ULSD Expansion 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

HYDROCRACKER FLASHER PROCESS FLOW DIAGRAM



DRAWN BY: M CHIAK
ORIGINAL: 7/26/07
REVISED: 8/13/09




ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 • (217) 782-2829
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 • (312) 814-6026

PAT QUINN, GOVERNOR
Memorandum

Technical Recommendation for Tax Certification Approval

Date: November 28, 2011
To: Robb Layman
From: Ed Bakowski 
Subject: WRB Refining LLC TC-10-14-10Q

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 Expansion Project, which undertakes various upgrades and new construction of certain process units that enable the refinery to prevent or reduce emissions of sulfur oxides from the diesel pool supplied to consumers in automobiles and other diesel-powered engines. In addition, 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 lower emissions of nitrogen oxides and particulate matter. Because the primary purpose of this system is to reduce or prevent air pollution, it can be certified as a pollution control facility.

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

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 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.


Exhibit B