CONSTRUCTION PERMIT/PSD APPROVAL - REVISED NESHAP SOURCE - NSPS SOURCE

PERMITTEE

Phillips 66 Carrier LLC Attn: Chintan Mehta 3010 Briarpark Dr, Office PWC-07-7330-13 Houston, Texas 77042

Application No.: 06110049 I.D. No.: 119050AAN

Date Originally Issued: July 19, 2007
Date Revision Received: September 6, 2013

Date Revision Issued: DRAFT

Subject: Terminal Expansion Project

Location: 2150 South Delmar Avenue, Hartford

This Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a Terminal Expansion Project, that is, modifications to the existing petroleum product terminal to accommodate the neighboring Wood River Refinery's CORE Project, as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

In conjunction with this permit, approval is given with respect to the federal regulations for Prevention of Significant Deterioration of Air Quality (PSD) for the above referenced project, as described in the application, in that the Illinois Environmental Protection Agency (Illinois EPA) finds that the application fulfills all applicable requirements of 40 CFR 52.21. This approval is issued pursuant to the federal Clean Air Act, as amended, 42 U.S.C. 7401 et. seq., the Federal regulations promulgated thereunder at 40 CFR 52.21 for Prevention of Significant Deterioration of Air Quality (PSD), and a Delegation of Authority agreement between the United States Environmental Protection Agency and the Illinois EPA for the administration of the PSD Program. This approval becomes effective in accordance with the provisions of 40 CFR 124.15 and may be appealed in accordance with the provisions of 40 CFR 124.19. This approval is also based upon and subject to the findings and conditions which follow:

If you have any questions on this permit, please contact Jason Schnepp at 217/524-3724.

| Raymond E. Pilapil | Date Issued: | |
|-----------------------------------|--------------|--|
| Acting Manager, Permit Section | | |
| Division of Air Pollution Control | | |

REP:JMS:

cc: Region 3
Lotus Notes
CES

TABLE OF CONTENTS

| | | Page |
|-----|--|------|
| 1.0 | LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED | 3 |
| 2.0 | FINDINGS | 4 |
| 3.0 | GENERAL SOURCE CONDITIONS | 8 |
| | 3.1 Project Description | 8 |
| | 3.2 General Applicable Provisions and Regulations | 9 |
| | 3.3 Non-applicability of Regulations of Concern | 11 |
| | 3.4 General Production and Emission Limits | 11 |
| | 3.5 General Recordkeeping Requirements | 11 |
| | 3.6 General Reporting Requirements | 12 |
| | 3.7 Authorization to Construct and Operate | 13 |
| 4.0 | UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS | 15 |
| | 4.1 Reserved [Formerly Loading Rack] | 15 |
| | 4.2 Storage Tanks | 16 |
| | 4.3 Components | 22 |
| | 4.4 Reserved [Formerly Roadways] | 26 |
| 5.0 | ATTACHMENTS | 27 |
| | 1a Project Emissions Increases Summary | 27 |
| | 1b Project Emissions Summary | 27 |
| | 2 Netting Analysis | 28 |
| | 3 Summary of LAER Determinations | 30 |
| | 4 Standard Permit Conditions | 31 |

1.0 LIST OF ABBREVIATIONS AND ACRONYMS COMMONLY USED

| BACT | Best Available Control Technology |
|-----------------------|---|
| CAAPP | Clean Air Act Permit Program |
| CFR | Code of Federal Regulations |
| СО | Carbon Monoxide |
| Consent | The Consent Decree captioned "United States of America, |
| Decree | State of Illinois, State of Louisiana, State of New |
| | Jersey, Commonwealth of Pennsylvania and Northwest Clean |
| | Air Agency, Plaintiffs, v. Phillips 66 Company, WRB |
| | Refining LLC, Monroe Energy LLC, Defendant," entered in |
| | the United States District Court for the Southern |
| | District of Texas, Civil Action No. H-05-0258, on |
| | December 5, 2005 and amended on May 1, 2007, August 11, |
| | 2008, April 13, 2012 and September 21, 2012. |
| CORE | Coker and Refinery Expansion |
| F | Fahrenheit |
| FCCU | Fluidized Catalytic Cracking Unit |
| HAP | Hazardous Air Pollutant |
| hr | Hour |
| IAC | Illinois Administrative Code |
| I.D. No. Illinois EPA | Identification Number of Source, assigned by Illinois EPA |
| | Illinois Environmental Protection Agency |
| LAER | Lowest Achievable Emission Rate Pounds |
| Lbs Mg | |
| Mo | Megagram Month |
| m ³ | Cubic meters |
| MSSCAM | Major Stationary Sources Construction and Modification |
| HOSCAM | (35 IAC Part 203), also known as Nonattainment New Source |
| | Review (NA NSR) |
| NESHAP | National Emission Standards for Hazardous Air Pollutants |
| NO _x | Nitrogen Oxides |
| NSPS | New Source Performance Standards |
| PM | Particulate Matter |
| PM ₁₀ | Particulate matter with an aerodynamic diameter less than |
| | or equal to a nominal 10 microns as measured by |
| | applicable test or monitoring methods |
| PM _{2.5} | Particulate matter with an aerodynamic diameter less than |
| | or equal to a nominal 2.5 microns as measured by |
| | applicable test or monitoring methods |
| ppm | Parts per million |
| PSD | Prevention of Significant Deterioration (40 CFR 52.21) |
| psia | Pound per square inch absolute |
| SO ₂ | Sulfur Dioxide |
| USEPA | United States Environmental Protection Agency |
| VOC | Volatile Organic Compounds (synonymous with VOM) |
| VOM | Volatile Organic Material |
| Yr | Year |

2.0 FINDINGS

- 2.1 Findings for the Revised Permit
 - a. Phillips 66 Carrier, formerly ConocoPhillips, applied for various revisions to address:
 - i. Changes to this Terminal Expansion Project due to changes occurring at the Wood River Refinery as part of its CORE Project. As a result, one new product tank would be installed at the terminal. Also, Phillips 66 Carrier will: (1) no longer construct two new ethanol storage tanks, (2) install one new distillate storage tank rather than two and (3) no longer modify the truck loading rack.
 - ii. Various other updates, clarifications and corrections to the terms of the permit for the Terminal Expansion Project.
 - b. Phillips 66 Company has applied for revisions to a related construction permit (Permit Number 06050052) that address changes at its Wood River Refinery (ID No. 119090AAA) that would occur as part of the CORE Project.
 - c. With respect to the applicability of MSSCAM, 35 IAC Part 203, to the Terminal Expansion Project:
 - i. This project was originally not subject to MSSCAM for NO_x , $PM_{2.5}$ or SO_2 . The requested revisions to the permit will still result in changes in emissions that are not significant so it is still not subject to MSSCAM for these pollutants. (See Attachments 1a, 1b and 2.)
 - ii. The requested revisions to this permit will also act to lower the increase in VOM emissions from this project. However, as the new product tank would now be part of this project and will emit VOM, it is subject to the requirements of MSSCAM for VOM. This is because this project was originally subject to MSSCAM for VOM.
 - d. With respect to the applicability of PSD, 40 CFR 52.21, to the Terminal Expansion Project:
 - i. This project was originally not subject to PSD for emissions of SO_2 , NO_x , PM or PM_{10} . The requested revisions to this permit will still result in changes in emissions that are not significant so it is still not subject to PSD for these pollutants. (See Attachments 1a, 1b and 2.)
 - ii. The requested revisions to this permit will also act to lower the increase in CO emissions from this project as the physical changes to the loading rack including afterburner are no longer planned.

- e. Following review of the requests for revised permits submitted by Phillips 66 Carrier, the Illinois EPA determined that the requirements for issuance of revised permits were met, including applicable requirements of MSSCAM.
- g. A copy of Phillips 66 Carrier's request for a revised permit, the Illinois EPA's review of this request and a draft of a revised permit were made available at a location in the vicinity of the terminal and the public was given notice and opportunity to review this material, to submit comments and to request and participate in a public hearing on this matter.

2.2 Findings for the Original Permit

- i. ConocoPhillips has requested a permit for modifications to the existing petroleum product terminal that are required to accommodate the Wood River Refinery's proposed CORE (Coker and Refinery Expansion) project. A separate construction permit application (Application Number 06050052) has been submitted for the changes at the refinery. A further description of the various changes being made is provided in each of the unit-specific conditions of this permit (Section 4.0).
 - ii. The Illinois EPA is considering ConocoPhillips's CORE project and the changes to the Wood River Products Terminal to comprise a single larger project for the purpose of PSD and NA NSR.
- b. The petroleum product terminal is located in an area designated nonattainment for ozone and $PM_{2.5}$. For purposes of regulating $PM_{2.5}$, PM_{10} will serve as a surrogate pollutant for $PM_{2.5}$, consistent with current USEPA guidance.
- c. i. This project and the net emissions increase for the project exceed 40 tons per year of volatile organic material (VOM). The project is therefore subject to 35 IAC 203: Major Stationary Sources Construction and Modification (MSSCAM). (See Attachment 5b of the original permit.)
 - ii. This project has potential emissions increases which are more than 100 tons/year of carbon monoxide (CO). The project is therefore subject to PSD review as a major modification for CO emissions. (See Attachment 3 of the original permit.)
- d. i. After reviewing all materials submitted by ConocoPhillips, the Illinois EPA has determined that the project will comply with all applicable Board emissions standards and meet the Lowest Achievable Emission Rate (LAER) as required by MSSCAM and Best Available Control Technology (BACT) as required by the PSD rules.
 - ii. A. As some units associated with this project which contribute to a significant increase in emissions do not undergo a physical change or change in the method of operation, these units are not subject to BACT or LAER. These units are further identified in Condition 3.3.1 (storage tanks with increase in utilization).
 - B. In addition to the emission units associated with this project not undergoing a physical change or change in the method of operation, there is no relaxation of any existing federally enforceable

emission limits as a result of this project for said units.

- e. The Illinois EPA has broadly considered alternatives to this project, as required by 35 IAC 203.306. Alternative sites would not possess the necessary piping infrastructure, and alternative sizes of equipment would not necessarily meet the consumer demands for gasoline supply. Accordingly, the benefits of the proposed project significantly outweigh its environmental and social costs.
- f. Pursuant to 35 IAC 203.305, the Permittee has demonstrated that all major stationary sources which it owns or operates in Illinois are in compliance or on a schedule for compliance with all applicable state and federal air pollution control requirements, as further identified in Condition 3.2.5 of this permit.
- g. A copy of the application and the Illinois EPA's review of the application and a draft of this permit was forwarded to a location in the vicinity of the plant, and the public was given notice and opportunity to examine this material, to submit comments, and to request and participate in a public hearing on this matter.

3.0 GENERAL SOURCE CONDITIONS

3.1 Project Description

The modifications to the existing petroleum product terminal are required to accommodate the Wood River Refinery's proposed CORE (Coker and Refinery Expansion) Project. The following are the key elements of the proposed modification:

- One new gasoline tank
- One new distillate tank
- One new product storage tank*

* New tank now being addressed by this revised permit. This revised permit also now only provides for installation of one new distillate tank, rather than two new distillate tanks. It also does not provide for installation of two new ethanol tanks or physical modification of the truck loading rack.

The key elements discussed above and other changes made as part of this project are further addressed in unit-specific conditions (see Section 4.1 through 4.3).

3.2 General Applicable Provisions and Regulations

- 3.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 4 (Unit-Specific Conditions for Specific Emission Units) of this permit.
- 3.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:
 - a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.
 - b. Pursuant to 35 IAC 212.123(a), no person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 IAC 212.122, except as allowed by 35 IAC 212.123(b) and 212.124.

3.2.3 Emissions Offsets

a. The Permittee, either alone or coordinated with the Phillips 66 Wood River Refinery, shall maintain 440.1 tons of VOM emission offsets generated by other sources in the St. Louis, Missouri/Metro-East, Illinois nonattainment area such that the total is 1.15 times the VOM emissions increase allowed for this

project (i.e., 378* tons of offsets for the permitted increase from the refinery, 328.7 tons/year, and 62.1 tons of offsets for the permitted increase from the terminal, 54.0 tons/year).

- * Note: The total VOM emission increases for the project considering the requested revisions is 329.3 tons/year. Therefore, the originally purchased 440.1 tons of VOM emission offsets remain sufficient for the project with revisions.
- b. i. This VOM emission reduction credit is provided by permanent emission reductions that occurred at the following source, as identified below. These emission reductions have been relied upon by the Illinois EPA to issue this permit and cannot be used as emission reduction credits for other purposes. The reductions at the source identified below have been made enforceable by the withdrawal of the air pollution control permits for the units generating the permanent emission reductions.

JW Aluminum, St. Louis, Missouri Reduction in VOM Emissions 440.1 tons/year VOM

- ii. If the Permittee proposes to rely upon emission offsets from another source, the Permittee shall apply for and obtain a revision to this permit prior to relying on such emission offsets, which application shall be accompanied by detailed documentation for the nature and amount of those alternative emission offsets.
- c. The acquisition of emission offsets shall be completed either 90 days after issuance of this Construction Permit or prior to commencement of construction of this project, whichever occurs later, unless the Permittee requests an extension and it is approved by the Illinois EPA.

Condition 3.2.3 represents the actions identified in conjunction with this project to ensure that the project is accompanied by emission offsets and does not interfere with reasonable further progress for VOM.

3.2.4 State Rules for Gasoline Distribution

Gasoline loadout operations at this terminal are subject to $35\ \text{IAC}\ 219\ \text{Subpart}\ \text{Y,}$ which provides that:

- a. No person shall cause or allow the transfer of gasoline into any delivery vessel from any bulk gasoline terminal unless: [35 IAC 219.582(a)]
 - i. The bulk gasoline terminal is equipped with a vapor control system that limits emission of VOM to 80 mg/l (0.00067 lbs/gal) of gasoline loaded.

- ii. The vapor control system is operating and all vapors displaced in the loading of gasoline to the delivery vessel are vented only to the vapor control system.
- iii. There is no liquid drainage from the loading device when it is not in use.
- iv. All loading and vapor return lines are equipped with fittings which are vapor tight.
- v. The delivery vessel displays the appropriate sticker pursuant to the requirements of 35 IAC 219.584(b) or (d); or, if the terminal is driver-loaded, the terminal owner or operator shall be deemed to be in compliance with 35 IAC 219.582 when terminal access authorization is limited to those owners and/or operators of delivery vessels who have provided a current certification as required by 35 IAC 219.584(c)(3).
- b. The operator of a bulk gasoline terminal shall: [35 IAC 219.582(b)]
 - i. Operate the terminal vapor collection system and gasoline loading equipment in a manner that prevents:
 - A. Gauge pressure from exceeding 18 inches of water and vacuum from exceeding 6 inches of water as measured as close as possible to the vapor hose connection.
 - B. A reading equal to or greater than 100 percent of the lower explosive limit (LEL measured as propane) when tested in accordance with the procedure described in EPA 450/2-78-051 Appendix B, incorporated by reference in 35 IAC 219.112.
 - C. Avoidable leaks of liquid during loading or unloading operations.
 - ii. Provide a pressure tap or equivalent on the terminal vapor collection system in order to allow the determination of compliance with 35 IAC 219.582(b)(1)(A).
 - iii. Within 15 business days after discovery of the leak by the owner, operator, or the Agency repair and retest a vapor collection system which exceeds the limits of 35 IAC 219.582(b)(1)(A) or (B).
- c. The Permittee shall comply with the applicable gasoline delivery vessel requirements and gasoline volatility standards in 35 IAC 219.584 and 219.585, respectively.

3.2.5 Schedules for Compliance

All major stationary sources which the Permittee owns or operates (or which are owned or operated by any entity controlling or controlled by, or under common control, with the owner or operator) in Illinois are in compliance, or on a schedule for compliance, with all applicable state and federal air pollution control requirements. [35 IAC 203.305]

3.3 Non-applicability Provisions for the Project

3.3.1 PSD/NA NSR

- a. The Permittee has addressed the applicability and compliance of 40 CFR 52.21, PSD and 35 IAC Part 203, Major Stationary Sources Construction and Modification (MSSCAM). The limits established by this permit are intended to ensure that the project addressed in this construction permit does not constitute a major modification of the source pursuant to these rules for NO_x , PM, PM_{10} , $PM_{2.5}$, and SO_2 emissions (See also Attachments 1a, 1b and 2).
 - i. This permit is issued based upon an increase in VOM emissions as working losses from storage of additional gasoline and distillate as a consequence of the CORE Project of at most 6.7 tons/year (Refer to Condition 4.2.6(a)(i)).
 - ii. This permit is issued based on at most a minimal increase in emissions attributable to additional loading of diesel at the existing loading rack. For this purpose, the increase in emissions at the rack shall not exceed 0.2 tons VOM/year, 50 tons GHG (expressed as CO_2e)/year, and 0.1 tons/year for all other pollutants combined.

3.3.2 NESHAP

This permit is issued based on the terminal being operated by the distribution division of Phillips 66 Company and owned by Phillips 66 Carrier LLC, so that it is subject to the NESHAP for Gasoline Distribution Facilities, 40 CFR 63 Subpart R (Refer to Gasoline Distribution Industry (Stage I) - Background Information for Promulgated Standards, USEPA, November 1994, EPA-453/R-94-002b, PB 95-170346, page 3-18).

Note: If the terminal were managed by the same personnel as the refinery, the terminal would be subject to the NESHAP for Refineries, $40~\mathrm{CFR}~63~\mathrm{Subpart}~\mathrm{CC}$.

3.4 General Production and Emission Limits

None.

3.5 General Recordkeeping Requirements

3.5.1 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 3.5.2 Records Associated With Non-Attainment Area Pollutants From Existing Units With Increase in Utilization
 - a. Storage Tanks

For the storage tanks for which the increase in utilization approach for determining the change in emissions is being used:

- i. The increase in throughput at the terminal's maximum capacity from the Terminal Expansion Project (gallons/month).
- ii. Emissions of VOM attributable to the increase in throughput (tons/month and tons/year).

3.6 General Reporting Requirements

- 3.6.1 Reporting and Notifications Associated with Performance Tests
 - a. The Illinois EPA shall be notified prior to these tests to enable the Illinois EPA to observe these tests. Notification of the expected date of testing shall be submitted a minimum of 30 days prior to the expected date. Notification of the actual date and expected time of testing shall be submitted a minimum of 5 working days prior to the actual date of the test. The Illinois EPA may at its discretion accept notifications with shorter advance notice provided that the Illinois EPA will not accept such notifications if it interferes with the Illinois EPA's ability to observe testing.
 - b. At least 60 days prior to the actual date of testing, a written test plan shall be submitted to the Illinois EPA for review. This plan shall describe the specific procedures for testing, including as a minimum:
 - i. The person(s) who will be performing sampling and analysis and their experience with similar tests.
 - ii. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means

- by which the operating parameters for the emission unit and any control equipment will be determined.
- iii. The specific determinations of emissions and operation, which are intended to be made, including sampling and monitoring locations.
- iv. The test method(s) that will be used, with the specific analysis method, if the method can be used with different analysis methods.
- v. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification.
- c. Copies of the Final Reports(s) for these tests shall be submitted to the Illinois EPA within 30 days after the test results are compiled and finalized. The Final Report shall include as a minimum:
 - i. A summary of results.
 - ii. General information.

 - iv. Detailed description of test conditions, including:
 - A. Process information.
 - B. Control equipment information.
 - v. Data and calculations, including copies of all raw data sheets, opacity observation records and records of laboratory analyses, sample calculations, and data on equipment calibration.

3.7 <u>Authorization to Construct and Operate</u>

3.7.1 Construct

- a. This permit shall become invalid if construction is not commenced within 18 months after this permit becomes effective, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable period of time, pursuant to 40 CFR 52.21(r)(2) and 35 IAC 203.113. The Illinois EPA may extend the 18-month period upon a satisfactory showing that an extension is justified. This condition supersedes Standard Condition 1.
- b. For purposes of the above provisions, the definitions of "construction" and "commence" at 40 CFR 52.21 (b)(8)-(9) and 35

IAC 203.113 and 203.116 shall apply, which require that a source must enter into a binding agreement for on-site construction or begin actual on-site construction. (See also the definition of "begin actual construction" and "actual construction" at 40 CFR 52.21(b)(11) and 35 IAC 203.103, respectively.)

3.7.2 Operate

The new/modified emission units addressed by this construction permit may be operated under this permit until renewal of the CAAPP permit provided the source submits a timely and complete CAAPP renewal application.

4.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

4.1 [Reserved] *

 * Note: Section 4.1 in the original permit addressed expansion of the truck loading rack. This revised permit no longer provides for physical changes to the truck loading rack.

4.2 Storage Tanks

4.2.1 Description

New tanks will be installed as part of this project as follows:

- One new distillate tank (Tank 2001). This tank will be a fixed roof design.
- One new gasoline tank (Tank 2002). This tank will have an internal floating roof.
- One new product storage tank (Tank 2003). This tank will have an internal floating roof and can be used to store gasoline or other product.*
 - * Additional tank now addressed by this revised permit. This revised permit no longer provides for construction of Ethanol Tanks 209 and 210 or Distillate Tank 2002.

Several existing tanks will experience an increase in utilization as a result of the Terminal Expansion Project. These emission increases are addressed in Section 3.3.1 of this permit.

4.2.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | Description | Emission Control Equipment |
|------------------|---|-------------------------------|
| Tank 2001 | New distillate storage tank; 200,000 barrel nominal working capacity; fixed roof. | None |
| Tank 2002 | New gasoline storage tank; 200,000 barrel nominal working capacity. | Internal Floating Roof |
| Tank 2003 | New product storage tank; 200,000 barrel capacity. | Internal Floating Roof |

4.2.3 Applicable Provisions and Emission Standards

An "affected tank" for the purpose of these unit-specific conditions, is a storage tank described in Conditions 4.2.1 and 4.2.2.

4.2.3-1 Applicable Federal Standards (40 CFR 60 Subpart Kb)

The affected gasoline and product tanks are subject to the New Source Performance Standards (NSPS) for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984, 40 CFR 60 Subpart Kb and applicable requirements of the General provisions of the NSPS, 40 CFR 60 Subpart A. In particular, these tanks shall be equipped with a fixed roof in combination with an internal floating roof meeting the following specifications:

a. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating

roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. [40 CFR 60.112b(a)(1)(i)]

- b. The internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the edge of the internal floating roof in accordance with 40 CFR 60.112b(a)(1)(ii).
- c. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface. [40 CFR 60.112b(a)(1)(iii)]
- d. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use. [40 CFR 60.112b(a)(1)(iv)]
- e. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. [40 CFR 60.112b(a)(1)(v)]
- f. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting. [40 CFR 60.112b(a)(1)(vi)]
- g. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening. [40 CFR 60.112b(a)(1)(vii)]
- h. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover. [40 CFR 60.112b(a)(1)(viii)]
- i. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)]

4.2.3-2 Applicable Federal Standards (40 CFR 63, Subpart R)

The affected gasoline tank and, when storing gasoline, the affected product tank, are subject to National Emission Standards for Hazardous Air Pollutants (NESHAP)_for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations), 40 CFR 63 Subpart R and applicable requirements of the General Provisions of the NESHAP, 40 CFR 63 Subpart A. In particular, when storing gasoline, these tanks shall be operated according to the requirements in 40 CFR 60.112b(a)(1), except for the requirements in 40 CFR 60.112b(a)(1)(iv) through (ix). [40 CFR 63.423(a)]

4.2.3-3 Applicable Federal Standards (40 CFR 63 Subpart EEEE)

The affected product tank, when storing an organic liquid as defined by 40 CFR 63.2406, is subject to the NESHAP for Organic Liquids Distribution (Non-Gasoline), 40 CFR 63 Subpart EEEE and applicable requirements of the General Provisions of the NESHAP, 40 CFR 63 Subpart A. In particular, this tank shall comply with the requirements for storage tanks at 40 CFR 63.2346(a). However, if the affected tank is in compliance with 40 CFR 60 Subpart Kb, it is considered in compliance with 40 CFR 63 Subpart EEEE, except that records shall be kept for 5 years rather than 2 years.

4.2.3-4 Applicable State Regulations (Storage Containers of VPL)

The affected gasoline and product tanks are subject to 35 IAC 219.121: Storage Containers of volatile petroleum liquids (VPL), which provides that:

a. These tanks shall be designed and equipped with a floating roof which rests on the surface of the VPL and is equipped with a closure seal or seals between the roof edge and the tank wall. Such floating roof shall not be permitted if the VPL has a vapor pressure of 86.19 kPa (12.5 psia) or greater at 294.3 K (70°F). No person shall cause or allow the emission of air contaminants into the atmosphere from any gauging or sampling devices attached to such tanks, except during sampling or maintenance operations. [35 IAC 219.121(b)(1)]

4.2.3-5 Applicable State Regulations (Loading Operations)

The affected tanks are subject to 35 IAC 219.122: Loading Operations, which provides that:

- a. The affected tanks shall be equipped with a permanent submerged loading pipe, submerged fill, or an equivalent device approved by the Illinois EPA according to the provisions of 35 Ill. Adm. Code 201 [35 IAC 219.122(b)].
- b. Pursuant to 35 IAC 219.122(c), if no odor nuisance exists the limitations of 35 IAC 219.122(b) shall only apply to the loading of volatile organic liquids with a vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3 K (70°F).

4.2.4 Non-applicability Provisions

- a. The affected distillate tank is not subject to 40 CFR 60 Subpart Kb, because this tank is a storage vessel with a capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure less than 3.5 kPa. [40 CFR 60.110b(b)]
- b. This permit is issued based on the affected tanks not being subject to 35 IAC 219.120 pursuant to 219.119(e) because the affected tanks are only used to store petroleum liquids.
- c. This permit is issued based on the affected distillate tank not being subject to 35 IAC 219.121: Storage Containers of VPL, because this tank will not store a volatile petroleum liquid, i.e., the vapor pressure will be below 1.5 psia.
- d. i. This permit is issued based on the affected distillate tank not being subject to 35 IAC 219.123: Petroleum Liquid Storage Tanks, because this tank will not store a volatile petroleum liquid, i.e., the vapor pressure will be below 1.5 psia.
 - ii. This permit is issued based on the affected gasoline and product tanks not being subject to 35 IAC 219.123: Petroleum Liquid Storage Tanks, because these tanks are subject to 40 CFR 60 Subpart Kb. [35 IAC 219.123(a)(5)]
- e. This permit is issued based on the affected gasoline and distillate tanks not being subject to 40 CFR 63 Subpart EEEE, because gasoline and distillate tanks are excluded organic liquids pursuant to 40 CFR 63.2406.

4.2.5 Control Requirements and Work Practices

a. LAER Technology

- i. A. The affected gasoline tank (Tank 2002) shall be controlled by an internal floating roof with a primary liquid-mounted seal consistent with the control requirements of 40 CFR 60 Subpart Kb and 40 CFR 63 Subpart R and a secondary rim-mounted seal, except as provided below.
 - B. Installation of a primary mechanical shoe seal on the affected gasoline tank (Tank 2002) in place of a primary liquid-mounted seal as required above is allowed, provided all other requirements of Condition 4.2.5(a)(i)(A) are met.
- ii. The affected product tank (Tank 2003) shall be controlled by an internal floating roof with a primary mechanical shoe seal consistent with the control requirements of 40 CFR 60 Subpart Kb and 40 CFR 63 Subpart CC and with a secondary rim-mounted seal.

iii. The true vapor pressure of the material stored in the affected distillate tank (Tank 2001) shall not exceed 0.1 psia at the maximum storage temperature.

Condition 4.2.5(a) represents the application of the Lowest Achievable Emission rate.

4.2.6 Production and Emission Limits

a. i. Breathing loss emissions of the following affected tanks shall not exceed the following limits:

| | VOM Emissions |
|-----------------|---------------|
| Tank | (Tons/Year) |
| Distillate Tank | 0.8 |
| Gasoline Tank | 13.1 |

Note: The working losses for the distillate and gasoline tanks are addressed by Condition 3.3.1, which includes both new and existing gasoline and distillate storage tanks.

- ii. Breathing and working loss emissions for the affected product tank shall not exceed 8.3 tons/year.
- b. Compliance with the annual limits shall be determined from a running total of 12 months of data.

4.2.7 Testing and Inspection Requirements

- a. The Permittee shall comply with the applicable test methods and procedures in 40 CFR 63.425 when storing gasoline in an affected tank.
- b. The Permittee shall fulfill all applicable testing and procedures requirements of 40 CFR 60.113b(a) for the affected gasoline and product tanks. [40 CFR 60.113b(a)]
 - i. If the owner or operator determines that it is unsafe to inspect the vessel to determine compliance with 40 CFR 60.113b(a) because the roof appears to be structurally unsound and poses an imminent danger to inspecting personnel, the owner or operator shall comply with the requirements in either 40 CFR 63.120(b)(7)(i) or 40 CFR 63.120(b)(7)(ii). [40 CFR 63.640(n)(8)(ii)]
 - ii. If a failure is detected during the inspections required by 40 CFR 60.113b(a)(2), and the vessel cannot be repaired within 45 days and the vessel cannot be emptied within 45 days, the owner or operator may utilize up to two extensions of up to 30 additional calendar days each. The owner or operator is not required to provide a request for the extension to the USEPA. [40 CFR 63.640(n)(8)(iii)]

b. The Permittee shall fulfill all applicable monitoring of operations requirements of 40 CFR 60.116b for the affected gasoline and product tanks. [40 CFR 60.116b]

4.2.8 Monitoring Requirements

Monitoring requirements are not set for the affected tanks.

4.2.9 Recordkeeping Requirements

- a. The Permittee shall maintain records of the following items:
 - i. The type, characteristic and quantity of each material stored in each affected tank, including the maximum true vapor pressure.
 - ii. Throughput (million gallons/month and million gallons/year).
- b. The Permittee shall fulfill all applicable recordkeeping requirements of 40 CFR 60.115b for the affected gasoline and product tanks. [40 CFR 60.115b]
- c. The Permittee shall fulfill all applicable recordkeeping requirements of 40 CFR 63.428 when storing gasoline in an affected tank, which records shall be kept for at least 5 years.

4.2.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA of deviations of an affected tank with the permit requirements of this section (Section 4.2). Reports shall include information specified in Conditions 4.2.10(a)(i) and (ii).
 - i. Emissions from the affected tanks in excess of the limits specified in Condition 4.2.6 within 30 days of such occurrence.
 - ii. Operation of the affected tanks in excess of the limit specified in Condition 4.2.6 within 30 days of such occurrence.
- b. The Permittee shall fulfill all applicable reporting requirements specified in 40 CFR 60.115b for the affected gasoline and product tanks. [40 CFR 60.115b]
- c. The Permittee shall fulfill all applicable reporting requirements of 40 CFR 63.428 when storing gasoline in an affected tank.

4.3 Components

4.3.1 Description

New piping will be required to connect the new storage tanks. Leaks may occur from components such as valves, connectors, and seals. Leaks are addressed by a Leak Detection and Repair (LDAR) Program.

4.3.2 List of Emission Units and Air Pollution Control Equipment

| Emission Unit | | Emission Control |
|---------------|---------------------------------|------------------|
| | Description | Equipment |
| Components | Components (Connectors, Valves, | LDAR Program |
| | Pump Seals) | |

4.3.3 Applicable Provisions and Emission Standards

a. An "affected component" for the purpose of these unit-specific conditions, is a new component installed as part of the Terminal Expansion Project as described in Conditions 4.3.1 and 4.3.2, and any subsequent replacement of such new component.

4.3.3-1 Applicable Federal Standards (40 CFR 63 Subpart R)

Affected components when in gasoline service are subject to the NESHAP for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations), 40 CFR 63 Subpart R and applicable requirements of the General Provisions of the NESHAP, 40 CFR 63 Subpart A. In particular:

- a. The Permittee shall perform a monthly leak inspection of all equipment in gasoline service. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 CFR 63.424(a)]
- b. A log book shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the log shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility. [40 CFR 63.424(b)]
- c. Each detection of a liquid or vapor leak shall be recorded in the log book. When a leak is detected, an initial attempt at repair shall be made as soon as practicable but no later than 5 calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within 15 calendar days after detection of each leak, except as provided in 40 CFR 63.424(d). [40 CFR 63.424(c)]
- d. Delay of repair of leaking equipment will be allowed upon a demonstration to the USEPA that repair within 15 days is not feasible. The owner or operator shall provide the reason(s) a delay is needed and the date by which each repair is expected to be completed. [40 CFR 63.424(d)]

- e. Initial compliance shall be achieved upon startup. [40 CFR 63.424(e)]
- f. As an alternative to compliance with the provisions in 40 CFR 63.424(a) through (d), owners or operators may implement an instrument leak monitoring program that has been demonstrated to the USEPA as at least equivalent. [40 CFR 63.424(f)]
- g. Owners and operators shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: [40 CFR 63.424(g)]
 - i. Minimize gasoline spills.
 - ii. Clean up spills as expeditiously as practicable.
 - iii. Cover all open gasoline containers with a gasketed seal when not in use.
 - iv. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

4.3.3-2 Applicable Federal Regulations (40 CFR 63 Subpart EEEE)

The affected components associated with the affected product tank, when storing organic liquid as defined by 40 CFR 63.2406, are subject to the NESHAP for Organic Liquids Distribution (Non-Gasoline), 40 CFR 63 Subpart EEEE and applicable requirements of the General Provisions of the NESHAP, 40 CFR 63 Subpart A. In particular, these components shall comply with the requirements for equipment leak components at 40 CFR 63.2346(c), which provides that for each pump, valve, and sampling connection that operates in organic liquids service for at least 300 hours per year, the Permittee shall comply with the applicable requirements under 40 CFR 63 Subpart H.

4.3.3-3 Applicable State Regulations (35 IAC 219 Subpart C)

Pursuant to 35 IAC 219.142, no person shall cause or allow the discharge of more than 32.8 ml (2 cu in) of volatile organic liquid with vapor pressure of 17.24 kPa (2.5 psia) or greater at 294.3 K (70°F) into the atmosphere from any pump or compressor in any 15 minute period at standard conditions.

4.3.4 Non-applicability Provisions

None.

4.3.5 Control Requirements and Work Practices

LAER Technology. This condition represents the application of the Lowest Achievable Emission Rate.

- a. The Permittee shall comply with general standards in 40 CFR 63.162 (40 CFR 63 Subpart H) for affected components in gas/vapor service, light liquid service and heavy liquid service, and the following specific standards:
 - i. Standards for pumps in light liquid service (40 CFR 63.163).
 - ii. Standards for open-ended valves or lines (40 CFR 63.167).
 - iii. Standards for valves in gas/vapor service and in light liquid service (40 CFR 63.168).
 - iv. Standards for pumps, valves, and connectors in heavy liquid service (40 CFR 63.169).
 - v. Standards for sampling connection systems (40 CFR 63.166).
 - vi. Standards for connectors in gas/vapor and in light liquid service (40 CFR 63.174).
- b. The Permittee shall monitor affected components to detect leaks by the method specified in 40 CFR 63.180(b), except that a more stringent definition of a leak shall apply, i.e., an instrument reading of 500 parts per million or greater from valves in gas and light liquid service and an instrument reading of 2,000 ppm or greater from pumps in light liquid service shall be considered a leak.
- c. The Permittee shall install the following low emission components associated with the affected product tank (Tank 2003):
 - i. Dual mechanical seals for all pumps in gas/vapor or light liquid service as defined by 40 CFR 63.161.
 - ii. Low emission valves for all valves in gas/vapor or light liquid service as defined by 40 CFR 63.161.

4.3.6 Production and Emission Limits

a. Emissions of VOM from the affected components and existing components at the terminal shall not exceed 2.4 tons per year (combined).

Note: This limit represents an increase of 0.1 tons VOM from baseline emissions before the Terminal Expansion Project. Compliance with this limit shall be determined using published USEPA methodology for determining VOM emissions from leaking components.

4.3.7 Testing Requirements

a. The Permittee shall use the Test Methods and Procedures of 40 CFR 63.180, except as provided in Condition 4.3.5(b), which provides a more stringent definition of a leak.

4.3.8 Monitoring Requirements

None.

4.3.9 Recordkeeping Requirements

- a. The Permittee shall maintain records consistent with the recordkeeping requirements of 40 CFR 63.181.
- b. The Permittee shall maintain records of the following items for affected components:
 - i. Number of components by unit or location and type.
 - ii. A file containing the maximum VOM emissions of the affected components, including supporting calculations (tons/year). This calculation shall be updated following completion of construction of the CORE Project or subsequent changes to the piping to reflect the actual component count.

4.3.10 Reporting Requirements

- a. The Permittee shall promptly notify the Illinois EPA of deviations of an affected component with the permit requirements of this section (Section 4.3). Reports shall describe the probable cause of such deviations, and any corrective actions or preventable measures taken. As the operation of affected components is addressed by reporting requirements under applicable rules, this requirement may be satisfied with the reporting required by such regulations.
- b. The Permittee shall submit reports consistent with the Reporting requirements of 40 CFR 63.182.

4.4 [Reserved] *

Note: Section 4.4 in the original permit addressed an increase in emissions at plant roadways resulting from expansion of the loading rack. As this permit no longer provides for changes to the truck loading rack, it also no longer provides for changes to roadways.

5.0 ATTACHMENTS

Attachment 1a: Project Emissions Increases Summary (Tons/Year)

| | NA NSR | | | | PSD | | | | | | | |
|----------------------------|--------------------------------------|--------|-------------------|-----------------|-------|--------|-----------------|-------|------------------|------------------|------------------|-----|
| Operation | VOM | NO_x | PM _{2.5} | SO ₂ | CO | NO_x | SO ₂ | PM | PM ₁₀ | GHG ^a | H ₂ S | TRS |
| Terminal Expansion Project | Terminal Expansion Project Increases | | | | | | | | | | | |
| Tanks | 28.9 | | | | | | | | | | | |
| Components | 0.1 | | | | | | | | | | | |
| Affected Loading Rack | 0.2 | | | | | | | | | 50 | | |
| SUBTOTAL: | 29.2 | | | | | | | | | 50 | | |
| Refinery CORE Increases | 300.1 | 921.8 | 161.7 | 2,094.2 | 883.7 | 921.8 | 2,094.2 | 282.6 | 176.1 | 216,300 | 5.8 | 0.5 |
| TOTAL: | 329.3 | 921.8 | 161.7 | 2,094.2 | 883.7 | 921.8 | 2,094.2 | 282.6 | 176.1 | 216,350 | 5.8 | 0.5 |
| Significance Threshold: | 40 | 40 | 10 | 40 | 100 | 40 | 40 | 25 | 15 | 75,000 | 10 | 10 |
| Greater Than | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No |
| Significant? | | | | | | | | | | | | |

Attachment 1b: Project Emissions Summary (Tons/Year)

| | NA NSR | | | | | PSD | | | | | | |
|--------------------|--------|---------|---------------------|-----------------|-------|---------|-----------------|-------|------------------|------------------|------------------|-----|
| | MOV | NO_x | PM _{2.5} * | SO ₂ | CO | NO_x | SO ₂ | PM | PM ₁₀ | GHG ^a | H ₂ S | TRS |
| Project Increases: | 329.3 | 921.8 | 161.7 | 2,094.2 | 883.7 | 921.8 | 2,094.2 | 282.6 | 176.1 | 216,350 | 5.8 | 0.5 |
| Project Decreases: | 1.2 | 1,045.9 | 132.4 | 11,131.3 | 27.9 | 1,045.9 | 11,131.3 | 132.4 | 132.4 | 0 | 0 | 0 |
| TOTAL: | 328.1 | -124.1 | 29.3 | -9,037.1 | 855.8 | -124.1 | -9,037.1 | 150.2 | 43.7 | 216,350 | 5.8 | 0.5 |

Notes:

--- Minimal or no increase

a. GHG emissions are expressed as CO_2e .

Attachment 2: Netting Analysis (Tons/Year)^a

| | | | NA NSR | | | PSD | | | | |
|--|----------|----------|----------|-------------------|-----------------|----------|-----------|--------|------------------|--|
| | Date | Permit | NO_x | PM _{2.5} | SO ₂ | NO_x | SO_2 | PM | PM ₁₀ | |
| Project Emissions Increases | | | 921.8 | 161.7 | 2,094.2 | 921.8 | 2,094.2 | 282.6 | 176.1 | |
| Project Emissions Decreases | | | -1,045.9 | 132.4 | -11,131.3 | -1,045.9 | -11,131.3 | 132.4 | 132.4 | |
| Project Subtotal: | | | -124.1 | 29.3 | -9,037.1 | -124.1 | -9,037.1 | 150.2 | 43.7 | |
| Contemporaneous ^b Increases | | | | | | | | | | |
| RAU Steam Reboiler (Boiler 17) | 10/2001 | 01060090 | 24.8 | | | | | | | |
| FCCU 1 Alterations (Boiler 17) | 9/2003 | 03030069 | 1.8 | 0.1 | 0.6 | 1.8 | 0.6 | 0.1 | 0.1 | |
| Low Sulfur Gasoline, Tier 2 | 11/2003 | 01120044 | 99.2 | 5.4 | 37.9 | 99.2 | 37.9 | 5.4 | 5.4 | |
| Hartford Integration | 4/2004 | 03080006 | 524.2 | | 17.3 | 524.2 | 17.3 | | | |
| Ultra Low Sulfur Diesel | 4/2006 | 04050026 | 225.3 | 42.2 | 57.5 | 157.8 | 57.5 | 42.2 | 42.2 | |
| Low Sulfur Gasoline (SZU) | 2/2007 | 05050062 | 20.6 | 10.9 | 31.9 | 20.6 | 31.9 | 10.9 | 10.9 | |
| North Property Flare | 6/2007 | 06030049 | 1.2 | | 0.1 | 1.2 | 0.1 | | | |
| DW Process Heater Project | 1/2009 | | 17.6 | 2.4 | 25.9 | 17.6 | 25.9 | 2.4 | 2.4 | |
| Cat Reformer Unit 3 Changes | 8/2010 | 10060028 | | 2.6 | 14.6 | | 14.6 | 2.6 | 2.6 | |
| Cooling Water Tower #13 | 3/2011 | 11010026 | | 0.5 | | | | 1.0 | 0.5 | |
| Steam System Alterations | 5/2011 | 08020003 | | 4.8 | 28.7 | | 28.7 | 4.8 | 4.8 | |
| Rental Boilers | 9/2012 | 11070026 | 28.0 | 2.6 | 0.5 | 28.0 | 0.5 | 2.6 | 2.6 | |
| Replacement TO for Marine Loading | 3/2013 | 13030018 | 0.3 | | | 0.3 | | | | |
| ULD Optimization | 6/2013 | 13040030 | 14.9 | 2.5 | 31.6 | 14.9 | 31.6 | 2.6 | 2.5 | |
| Tier 3 Low Sulfur Gasoline | Est 2014 | 14050001 | 23.2 | 1.0 | 12.7 | 23.2 | 12.7 | 1.0 | 1.0 | |
| Contemporaneous Decreases | | | | | | | | | | |
| RAU Deethanizer Heater Shutdown | 10/2001 | 92110025 | -19.6 | -1.5 | | | | | | |
| CR-1 2 nd Inter-reactor Heater, H-3 | 2/2002 | 92110025 | -32.1 | -3.0 | | | | | | |
| CR-1 2 nd Inter-reactor Heater, H-2 | 2/2002 | 92110025 | -19.1 | -6.4 | | - | | | | |
| CR-1 Feed Preheater, H-1 | 2/2002 | 92110025 | -19.5 | -6.5 | | | | | | |
| No. 2 Crude Unit, H-25 | 10/2002 | 03080006 | -29.7 | -0.6 | -0.8 | -29.7 | -0.8 | -0.6 | -0.6 | |
| Isom Unit, H-33 (HIP) | 10/2002 | 03080006 | -2.5 | -0.1 | -0.1 | -2.5 | -0.1 | -0.1 | -0.1 | |
| Isom Unit, H-32 (HIP) | 10/2002 | 03080006 | -10.8 | -0.2 | -0.3 | -10.8 | -0.3 | -0.2 | -0.2 | |
| LSR Hydrotreating, H-31 (HIP) | 10/2002 | 03080006 | -1.7 | | | -1.7 | | | | |
| Hydrogen Plant, H-30 (HIP) | 10/2002 | | -10.0 | -0.2 | -0.3 | -10.0 | -0.3 | -0.2 | -0.2 | |
| Alkylation Heater, H-19 (HIP) | 10/2002 | 03080006 | -20.8 | -0.4 | -0.6 | -20.8 | -0.6 | -0.4 | -0.4 | |
| Reroute/Eliminate Flare Streams | 10/2002 | 03080006 | -17.4 | | | -17.4 | | | | |
| FCCU Shutdown at Hartford | 10/2002 | 03080006 | -320.0 | -323.3 | -73.9 | -320.0 | -73.9 | -323.3 | -323.3 | |
| CR-3 2 nd Reheat Heater | 11/2002 | 92110025 | -86.7 | -5.8 | -339.0 | -86.7 | -339.0 | -11.1 | -8.0 | |
| CR-3 1 st Reheat Heater | 11/2002 | 92110025 | -113.1 | -10.9 | -646.6 | -113.1 | -646.6 | -21.1 | -15.4 | |
| CR-3 Charge Heater (fuel switch) | 11/2002 | 92110025 | -115.8 | -11.2 | -663.0 | -115.8 | -663.0 | -21.6 | -15.6 | |
| Shutdown RFP | 12/2002 | 92110025 | -2.6 | -0.2 | | -2.6 | | -0.2 | -0.2 | |
| Shutdown Old NP Ground Flare | 7/2007 | 06030049 | -1.5 | | -2.9 | -1.5 | -2.9 | | | |
| Contemporaneous Changes Subtotal°: | | | 158.2 | -295.3 | -1,468.2 | 156.2 | -1,468.2 | -303.2 | -289.0 | |
| NET EMISSIONS CHANGE°: | | | 34.2 | -266.0 | -10,505.3 | 32.1 | -10,505.3 | -153.0 | -245.3 | |
| Significance Threshold: | | | 40 | 10 | 40 | 40 | 40 | 25 | 15 | |
| Greater Than Significant? | | | No | No | No | No | No | No | No | |

Notes:

- --- Minimal or no increase.
- a. Netting is not performed for H_2S or TRS emissions because the project increase for these pollutants is less than significant (See Attachment 1).
- b. The contemporaneous time period for PSD pollutants is April 2002 through January 2011. The contemporaneous time period for Nonattainment Area NSR pollutants subject to 35 IAC Part 203 is October 2001 through January 2011. The contemporaneous time period for Nonattainment Area NSR pollutants subject to 40 CFR 51 Appendix S is April 2002 through January 2011. Project emission increases since 2011 and planned projects for which permit applications have been submitted to IEPA have also been included.
- c. Totals may not match sum of individual unit totals due to rounding.

Attachment 3 - Summary of BACT/LAER Determinations

| | Permit | LAER Determination for VOM |
|-------------|---------|--|
| Operation | Section | Control Technology/Emission Limit |
| New Storage | 4.2 | Internal Floating Roof with primary and secondary seals for the new gasoline and |
| Tanks | | product tanks; true vapor pressure of material stored limited to 0.1 psia for the |
| | | new distillate tank. |
| Components | 4.3 | LDAR program equivalent to 40 CFR 63 Subpart H with a leak definition of 500 ppm |
| | | for valves in light liquid service and 2000 ppm for pumps in light liquid service. |
| | | LDAR was expanded to include low emission valves and dual pump seals for units |
| | | that commence construction after the issue date of this permit revision. |

ATTACHMENT 4: STANDARD PERMIT CONDITIONS

STANDARD CONDITIONS FOR CONSTRUCTION/DEVELOPMENT PERMITS
ISSUED BY THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

The Illinois Environmental Protection Act (Illinois Revised Statutes, Chapter 111-1/2, Section 1039) authorizes the Environmental Protection Agency to impose conditions on permits, which it issues.

The following conditions are applicable unless superseded by special $condition\left(s\right)$.

- 1. Unless this permit has been extended or it has been voided by a newly issued permit, this permit will expire one year from the date of issuance, unless a continuous program of construction or development on this project has started by such time.
- 2. The construction or development covered by this permit shall be done in compliance with applicable provisions of the Illinois Environmental Protection Act and Regulations adopted by the Illinois Pollution Control Board.
- 3. There shall be no deviations from the approved plans and specifications unless a written request for modification, along with plans and specifications as required, shall have been submitted to the Illinois EPA and a supplemental written permit issued.
- 4. The Permittee shall allow any duly authorized agent of the Illinois EPA upon the presentation of credentials, at reasonable times:
 - a. To enter the Permittee's property where actual or potential effluent, emission or noise sources are located or where any activity is to be conducted pursuant to this permit,
 - b. To have access to and to copy any records required to be kept under the terms and conditions of this permit,
 - c. To inspect, including during any hours of operation of equipment constructed or operated under this permit, such equipment and any equipment required to be kept, used, operated, calibrated and maintained under this permit,
 - d. To obtain and remove samples of any discharge or emissions of pollutants, and
 - e. To enter and utilize any photographic, recording, testing, monitoring or other equipment for the purpose of preserving, testing, monitoring, or recording any activity, discharge, or emission authorized by this permit.

- 5. The issuance of this permit:
 - a. Shall not be considered as in any manner affecting the title of the premises upon which the permitted facilities are to be located,
 - b. Does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the proposed facilities.
 - c. Does not release the Permittee from compliance with other applicable statutes and regulations of the United States, of the State of Illinois, or with applicable local laws, ordinances and regulations.
 - d. Does not take into consideration or attest to the structural stability of any units or parts of the project, and
 - e. In no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the proposed equipment or facility.
- 6a. Unless a joint construction/operation permit has been issued, a permit for operation shall be obtained from the Illinois EPA before the equipment covered by this permit is placed into operation.
- b. For purposes of shakedown and testing, unless otherwise specified by a special permit condition, the equipment covered under this permit may be operated for a period not to exceed thirty (30) days.
- 7. The Illinois EPA may file a complaint with the Board for modification, suspension or revocation of a permit.
 - a. Upon discovery that the permit application contained misrepresentations, misinformation or false statement or that all relevant facts were not disclosed, or
 - b. Upon finding that any standard or special conditions have been violated, or
 - c. Upon any violations of the Environmental Protection Act or any regulation effective thereunder as a result of the construction or development authorized by this permit.