217/782-2113

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

PERMITTEE

ExxonMobil Oil Corporation
Attn: Jeffrey L. Noga – Environmental Group Leader
Post Office Box 874
Joliet, Illinois 60434

Application No.: 05030076
Applicant's Designation: CCUP
Subject: Crude/Coker Utilization Project
Date Issued: June 26, 2008
Location: I-55 & Arsenal Road, Channahon

I.D. No.: 197800AAA
Date Received: May 27, 2008

This Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of the Crude/Coker Utilization Project (CCUP), that is, various changes to the refinery to improve the calendar day performance of existing equipment, as described in the above referenced application. This Permit is subject to standard conditions attached hereto and the following special conditions:

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:

Findings

1. ExxonMobil Oil Corporation has requested a permit to undertake a group of efficiency improvement and unit reliability projects that will allow the refinery to reduce operating costs and improve long-term daily average performance of existing equipment by more consistently approaching short-term design levels of throughput. The physical changes included as part of the project(s) are primarily to process equipment that do not have vents or stacks discharging emissions directly to the atmosphere, such as heat exchanger trains, pumps, etc. The changes being proposed will not change the design capacity of any existing units at the refinery. However, on an annual basis, throughput of several units is expected to increase above historical levels. The change in annual throughput at the Crude Unit will allow increases in throughput of downstream units and the resultant changes in emissions have been evaluated as part of this project.

2. The ExxonMobil Refinery 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 $PM_{2.5}$.

3a. This project and the net emissions increase for the source exceeds 40 tons per year of nitrogen oxides (NO_x). The project is therefore subject to 35 IAC 203: Major Stationary Sources Construction and Modification (MSSCAM).

b. This project also has potential emissions increases which are more than 40 tons/year of nitrogen oxides (NO_x), 100 tons/year of carbon monoxide (CO), 25 tons/year of particulate matter (PM), and 15 tons/year of particles with size equal to or smaller than 10 microns (PM_{10}). The project is therefore subject to PSD review as a major modification for NO_x, CO, PM and PM_{10} emissions.

4a. After reviewing all materials submitted by ExxonMobil, the Illinois EPA has determined that the project will comply with all applicable Board emissions standards.

b. i. As the 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 1 of this Permit.

ii. The new components and storage tank(s) associated with the project emit only VOM. The VOM emissions generated by these units will not exceed the applicable significant threshold for VOM (40 tons).

iii. 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.

5. The Illinois EPA has broadly considered alternatives to this project, as required by 35 IAC 203.306. This project will result in additional fuel produced with lower overall energy demand (fuel combustion/electric generation) on a per barrel basis without the addition of any new process emissions units. Accordingly, the benefits of the proposed project significantly outweigh its environmental and social costs.

6. 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 1.2.5 of this permit.

7. 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.

1.0 OVERALL SOURCE CONDITIONS

1.1 Project Description

The Permittee is making changes to improve unit reliability, efficiency, and performance of existing units at the refinery, including the Crude Unit and downstream units. These proposed changes do not increase the design capacity of any existing unit at the refinery.

These projects will involve installation of piping and associated components. The potential exists for VOM emissions to occur from leaks associated with the flanges, valves, pumps, and other components associated with the piping. These fugitive emissions will be controlled by an existing leak detection and repair program.

All components associated with the CCUP Project that are in volatile organic compound service are also assumed to be “in organic hazardous air pollutant service” as defined in 40 CFR 63, Subpart CC.

The improved reliability/efficiency/performance will provide an increased average calendar day rate, resulting in a potential increase in emissions from existing units at the refinery. These units currently have sufficient capacity to handle the increased rates.

Additional control measures will also be added as part of this project to reduce emissions from existing asphalt material tanks (Tanks 231 and 232). Specifically, Tanks 231 and 232 will be controlled by asphalt vent packages.

1.2 Source-Wide Applicable Provisions and Regulations

1.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 2 (Unit-Specific Conditions for Specific Emission Units) of this permit.

1.2.2 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.

1.2.3 Operation of the CCR Regenerator Vent (2-D-89) during malfunction and breakdown may be allowed pursuant to 35 IAC 201, Subpart I as provided in the source's CAAPP permit.

1.2.4 Emissions Offsets

a. i. The Permittee shall maintain 752.9 tons of NO_x emission offsets generated by other sources in the Chicago nonattainment area such that the total is 1.15 times the NO_x emissions allowed from this project.

ii. The Permittee shall maintain 106.0 tons of PM_{10} emission offsets generated by other sources in the Chicago nonattainment area such that the total is equal to the PM_{10} emissions increase for this project.

b. i. These NO_x and PM_{10} emission reduction credits are 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.

Midwest Generation – Collins Facility, Morris, I.D. No. 063806AAF
Permanent Shutdown of Facility 753 tons/year NO_x
106 tons/year PM_{10}

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 the CCUP Project, whichever occurs later, unless the Permittee requests an extension and it is approved by the IEPA.

Condition 1.2.4 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 $PM_{2.5}$ and NO_x.

1.2.5 Compliance Schedules

The Permittee is subject to and shall take the actions required in the schedules of compliance established for the following emission units. These schedules may be adjusted through a revision of this permit in the event an unforeseen delay beyond the Permittee's control occurs. In addition, all other alleged non-compliance (with applicable state and federal air pollution control requirements) posed by the major stationary sources in Illinois that are owned, operated, or under the same common control as the Permittee are addressed in court orders or are addressed by compliance schedules in federally enforceable permits.

Compressor Environmental Upgrades - 40 CFR Part 63, Subpart CC.

a. The Permittee shall achieve compliance with all applicable requirements of 40 CFR Part 63, Subpart CC for Compressors 19-G-3A/B no later than November 25, 2005 and 20-G-1A/B no later than December 22, 2005.

b. The Permittee shall achieve compliance with all applicable requirements of 40 CFR Part 63, Subpart CC for Compressors 1-G-1A/B, 2-G-2A/B and 3-G-2A/B no later than May 31, 2006.

Note: The Permittee has submitted a permit application for the Compressor Environmental Upgrades required by 40 CFR Part 63 Subpart CC dated May 13, 2005.

Note: Pursuant to 35 IAC 203.305, the Permittee must demonstrate that it is in compliance, or on a schedule for compliance, with all applicable state and federal air pollution control requirements. As part of this application, the Permittee has proposed schedules of compliance for certain emission units, which are now made enforceable by this Condition. These schedules become effective upon issuance of this Construction Permit.

1.3 <u>Source-Wide Non-Applicability of Regulations of Concern</u>

1.3.1. Prevention of Significant Deterioration/NAA NSR

The Permittee has addressed the applicability and compliance of 40 CFR 52.21, Prevention of Significant Deterioration (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 refinery pursuant to these rules for SO_2 and VOM emissions (See also Attachment 1 and 4a). For this purpose, this permit is issued based upon:

a. A decrease of 5.9 tons of VOM emissions and 2,593 tons of SO_2 emissions attributable to the Coker Blowdown Recovery Project. The operational limitations of Construction Permit 03060091 (See Condition 1.1.5(b)) issued on July 23, 2003 ensure that the decreases are practically enforceable.

b. A decrease of 10.64 tons of VOM emissions attributable to the addition of asphalt vent packages (AVPs) to Storage Tanks 231 and 232 as part of this project. The operational limitations of Condition 2.2.5(d) and (e), and the emission limitations of Condition 2.2.6(a) ensure that the decreases are practically enforceable.

1.3.2 New Source Performance Standards

a. This permit is issued based on this project not triggering the applicability of New Source Performance Standards (NSPS) for Petroleum Refineries, 40 CFR Part 60, Subpart J for the South Sulfur Recovery Plant because the plant has the capacity to handle additional acid gas without a capital expenditure and it will not undergo a physical or operational change as part of this project.

b. This permit is issued based on this project not triggering the NSPS for Industrial-Commercial-Institutional Steam Generating Units, 40 CFR Part 60, Subpart Db for the Auxiliary Boiler because the increased firing of the boiler is within its capacity and the boiler will not undergo a physical or operational change.

c. This permit is issued based on this project not triggering the NSPS for Petroleum Refineries, 40 CFR 60, Subpart J for the Crude Atmospheric Heaters (1-B-1A and 1-B-1B), Crude Vacuum Heater (13-B-2), Crude Unit Feed Preheater (1-B-3/13-B-4), CHD Charge Heater (3-B-1) and Auxiliary Boiler (55-B-100) because the increased firing of these units is within the capacity of the units and there will be no physical or operational change at these units.

1.3.3 National Emission Standards For Hazardous Air Pollutants

a. This permit is issued based on the asphalt truck loading facility and the asphalt railcar loading rack not being subject to the NESHAP for Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR 63, Subpart LLLLL because they are not used to transfer “oxidized asphalt” as defined in 40 CFR 63.8698.

1.4 Source-Wide Control Requirements and Work Practices

a. The operation of the Co-Generation Unit (Gas Turbine Generator [20-N-1] and Waste Heat Steam Generator [20-B-1]) shall be coordinated with the operation of the Auxiliary Boiler and the East and West CO Boilers (14-B-3, 14-B-4) as follows:

i. When the Co-Generation Unit and East and West CO Boilers are operating, the Auxiliary Boiler shall be operated at a rate not to exceed 340 mmBtu/hr on a daily average basis.

ii. Notwithstanding the above, the Auxiliary Boiler (55-B-100) may be operated in excess of 340 mmBtu/hour for purposes of shakedown/lineout and/or testing. The emissions from such additional firing shall be included when determining compliance with the annual emission limitations for the Auxiliary Boiler.

iii. A. When the Co-Generation Unit is shutdown or one or both of the East and West CO Boilers is shutdown (including the time period to bring a unit down), the Auxiliary Boiler may be operated at a firing rate above 340 mmBtu/hour (daily average) as needed to make up for reduced operation of the CO boiler(s) or Co-Generation Unit due to equipment failure or unit outage.

B. For purposes of determining compliance with the emission limits in Condition 1.5(b), emissions from the Auxiliary Boiler (55-B-100) associated with the "additional generation" addressed above may be excluded.

Note: This Condition establishes new operating requirements for the Auxiliary Boiler that were established in Condition 1.1.5-1(a) of the revised uLSD Project Construction Permit (03110060) that will supersede the requirements established by Condition 2.1.5(c) of the LSM Project Construction Permit (01030070), which addresses the configuration of the Auxiliary Boiler after the LSM Project. The 45 mmBtu/hour increase in the current limit (295 mmBtu/hour) as established in the LSM Project Construction Permit for the Auxiliary Boiler, accounts for increased steam production associated with the uLSD Project. This limit may be revised in the future as part of the permitting of other projects at the source to account for steam production associated with such other projects. This limit has been carried through in this Construction Permit for clarity regarding how to address emissions from “additional generation” described above.

1.5 Source-Wide Production and Emission Limitations

a. Operation of the following emission units shall not exceed the following limits:

Emission Unit	Maximum Firing Rate* (mmBtu/Hour)
1-B-1A	389
1-B-1B	389
1-B-3/13-B-4	240
13-B-2	277
16-B-1A, 16-B-1B (combined)	366
17-B-1	112
2-B-3, 4, 5, 6 (combined)	680
3-B-A	132
21-B-1	73

* Annual Average

b. Combined annual emissions from the Crude Atmospheric Heaters (1-B-1A and 1-B-1B), Crude Vacuum Heater (13-B-2), Crude Unit Feed Preheater (1-B-3/13-B-4), Coker Unit Heaters (16-B-1A and 16-B-1B), PreTreater Unit Charge Heater (17-B-1), Reformer Unit Charge Heaters (2-B-3, 4, 5, 6), CHD Unit Charge Heater (3-B-1) Hot Oil Heater (21-B-1) and Auxiliary Boiler (55-B-100) shall not exceed the following limits:

Pollutant	Emissions (Tons/Year)
NO_x	1,270.75
CO	391.97
SO_2	374.75
VOM	40.79
PM	41.54
PM_{10}	41.54

The above requirement and the recordkeeping requirements of Condition 1.6.2 become effective when the Permittee begins operation of the Crude and Coker Units following completion of the changes occurring within the Crude and Coker Units as part of the CCUP.

c. Annual emissions from the FCC Unit, North Sulfur Recovery Plant, and South Sulfur Recovery Plant shall not exceed 2,130.8 tons NO_x, 20,958.42 tons SO_2, 2,816 tons CO, 3.4 tons VOM and 469.1 tons PM/PM_{10}. Combined emissions from the North Sulfur Recovery Plant and South Sulfur Recovery Plant of SO_2, when both the North Sulfur Recovery Plant and South Sulfur Recovery Plant are operating shall not exceed 1,899.9 lbs/hour and 8,321.42 tons/year. When the North Sulfur Recovery Plant is out of service, the South Sulfur Recovery Plant emissions shall not exceed 2,482.7 lbs/hour of SO_2. The above limitations reflect the maximum allowable emissions represented in Condition 1.1.6(d)(ii) of the revised uLSD Construction Permit (03110060)

and supersede the limits found in Condition 2.1.6(b) of the LSM Project Construction Permit (01030070).

d. Emissions from the Regenerator Vent/CCR Vent Gas Wash Tower shall not exceed the following limits:

Pollutant	Emissions (Lbs/Hour)	Emissions (Tons/Year)
NO_x	0.16	0.7
SO_2	1.98	8.67
CO	0.82	3.60
PM/PM_{10}	0.16	0.70
HCl/CL_2	1.82	7.95

The above limitation reflects the allowable emissions established in Condition 2.1.6(d)(i) the LSM Project Construction Permit (01030070). This limit has been carried through in this Construction Permit for clarity. There are no changes to the previously established limitations as part of this project.

e. Compliance with the annual limits shall be determined from a running total of 12 months of data.

1.6 Plant-Wide Recordkeeping Requirements

1.6.1 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.

1.6.2 The Permittee shall maintain records of the following items to demonstrate compliance with Condition 1.5:

a. Heat and sulfur content of refinery fuel gas burned in the affected process heaters and Auxiliary Boiler shall be determined, with supporting documentation, on a representative frequency, i.e., sulfur content shall be determined in accordance with the NSPS 40 CFR 60.105, as

the NSPS is applicable to certain heaters at the refinery, and heat content shall be determined at least weekly;

b. Heat and sulfur content of fuel oil, with supporting documentation, on a representative frequency, i.e., sulfur and heat content shall be determined for each batch or lot of oil added to the storage tank serving an affected heater. It should be noted that future potential emissions from all affected heaters, except the Crude Unit Feed Preheater is based on discontinued use of fuel oil on a continuous basis. The future potential emissions for the Crude Unit Feed Preheater account for limited fuel oil usage during periods of limited fuel gas availability as further described in Construction Permit 97030078.

c. Fired fuel duty (gross) from the affected process heaters and Auxiliary Boiler, daily;

d. Quantity of fuel burned in each affected process heater and the Auxiliary Boiler (mmscf/month and mmscf/year);

e. Emissions of SO_2, NO_x, CO, VOM, PM, and PM_{10} from the affected process heaters and Auxiliary Boiler (except as addressed by Condition 1.6.2(g)), in tons/month, with supporting calculations;

f. Annual emissions of SO_2, NO_x, CO, VOM, PM, and PM_{10} from the affected process heaters and Auxiliary Boiler (except as addressed by Condition 1.6.2(g)), for the current month and the previous 11 months, tons/year;

g. For times when the Auxiliary Boiler is fired above 340 mmBtu/hr (daily average), the reason why (e.g., the Co-Generation Unit and/or a CO Boiler was shutdown, etc.), and quantification of the emissions resulting from the additional generation allowed by Condition 1.4(a)(iii)(B), that are not included in monthly or annual emissions records. This condition reiterates the requirements of Condition 1.1.9(e) established in the revised uLSD Construction Permit (03110060) and supersedes Condition 2.1.9(b)(vi) established in LSM Construction permit (01030070); and

h. Emissions of NO_x, SO_2, CO, PM/PM_{10}, and HCL/CL_2 from the CCR Regenerator Vent/Vent Gas Wash Tower (tons/month and tons/year) with supporting calculations.

1.7 Plant-Wide Compliance Procedures

1.7.1 Components

a. Emissions from the components, i.e., leaks from valves, pumps, fittings, etc. shall be determined from standard emission estimate methodology published by USEPA in “Protocol for Equipment Leak Emission Estimates”, EPA-453/R-95-017 (November 1995) or API Publication Number 337 for components in heavy liquid service.

1.7.2 Tanks

a. Emissions from the affected tanks shall be determined through the use of an approved USEPA methodology, such as the TANKS program, appropriate AP-42 factors or other approved methods.

1.8. The new/modified emission units addressed by this construction permit may be operated under this permit until renewal of the CAAPP permit or a modification of the CAAPP permit is issued provided the Permittee submits a timely application to amend the current CAAPP permit to incorporate this project.

2.0 UNIT SPECIFIC CONDITIONS FOR SPECIFIC EMISSION UNITS

2.1 Unit: Components

2.1.1 Description

These projects will involve installation of certain piping and associated components. The potential exists for VOM emissions to occur from leaks associated with the flanges, valves, pumps, and other components associated with the piping. These fugitive emissions are controlled by a leak detection and repair program.

All components associated with the CCUP Project that are in volatile organic compound service are also assumed to be “in organic hazardous air pollutant service” as defined in 40 CFR 63, Subpart CC.

2.1.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Components	New Fugitive Components (valves, flanges, etc)	None

2.1.3 Applicable Provisions and Regulations

a. An “affected component” for the purpose of these unit-specific conditions, is a new component installed as part of the CCUP Project as described in Conditions 2.1.1 and 2.1.2, and any subsequent replacement of such new component.

b. This permit is issued based upon the affected components being subject to National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries, 40 CFR 63, Subparts A and CC. The Illinois EPA administers the NESHAP for subject sources in Illinois pursuant to a delegation agreement with the USEPA. The Permittee shall comply with all applicable requirements of 40 CFR 63, Subparts A and CC.

   Note: The Permittee has indicated that it generally has chosen to comply with the equipment leak requirements specified in 40 CFR 63, Subpart CC by complying with the Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry 40 CFR 60, Subpart VV. This is one of the options for compliance set forth by 40 CFR 63, Subpart CC.

2.1.4 Non-Applicability of Regulations of Concern

a. Pursuant to 40 CFR 63.640(p), components that would also be subject to the provisions of 40 CFR Parts 60 and 61 are required only to comply with the provisions of 40 CFR Part 63 Subpart CC, rather than Parts 60 and 61.

b. Notwithstanding the fact that the affected components are subject to 35 IAC 218.445 through 218.452, which require a leak monitoring and repair program, the source is not required to address the provisions of these state rules. This action was based on the Illinois EPA's finding, pursuant to action in the CAAPP permit, following review of the various requirements of these state rules and the federal rules at 40 CFR Part 63, Subpart CC, that compliance with these federal rules, as is required, will assure compliance with these state rules. (Refer to 40 CFR 63.640(q)) The Permittee has chosen to comply with the equipment leak requirements of 40 CFR 63 Subpart CC by complying with the provisions of 40 CFR 60 Subpart VV pursuant to 40 CFR 63.648(a).

2.1.5 Control Requirements and Work Practices

a. The Permittee shall comply with the applicable standards of 40 CFR 60.482-1 through 40 CFR 60.482-10.

2.1.6 Production and Emission Limitations

a. Emissions of volatile organic material (VOM) from the new* components (i.e., valves, flanges, etc.) associated with the CCUP Project shall not exceed 5.71 tons per year, with emissions calculated using the compliance procedures specified in Condition 1.7.1.

* This limit does not apply to components that are already present at the refinery provided the Permittee properly identifies which components are new.

b. Compliance with the annual limit shall be determined from a running total of 12 months of data.

2.1.7 Testing Requirements

a. The Permittee shall comply with the applicable test methods and procedures requirements of 40 CFR 60.485.

2.1.8 Monitoring Requirements

a. Monitoring requirements are not set for the affected components.

2.1.9 Recordkeeping Requirements

a. For fugitive emissions from new components installed related to this project, records shall be kept for the following:

   i. The number of new components by unit or location and type related to this project; and

   ii. A file containing the maximum VOM emissions attributable to the new components determined in accordance with Condition 1.7.1, including supporting calculations.

b. The Permittee shall comply with the applicable recordkeeping requirements of 40 CFR 60.486.

2.1.10 Reporting Requirements

a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected component with the permit requirements of this section (2.1). 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 comply with the applicable reporting requirements of 40 CFR 60.487.

2.2 Unit: Storage Tanks

2.2.1 Description

Asphalt Vent Packages (AVP) will be added as part of this project to reduce emissions from existing asphalt material tanks (Tank 231 and 232). A temporary AVP will be installed for use during periods of time when the primary AVPs are not in operation or operating properly.

In addition to being able to store brackish water in Tank 103 is now authorized to store Syncrude/Crude/Various Petroleum Liquids.

2.2.2 List of Emission Units and Air Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Tank 103	Existing External Floating Roof Storage Tank	Primary and Secondary Seals
Tank 231	Existing Fixed Roof Storage Tank	Asphalt Vent Package
Tank 232	Existing Fixed Roof Storage Tank	Asphalt Vent Package

2.2.3 Applicable Provisions and Regulations

a. An “affected tank” for the purpose of these unit-specific conditions, is a storage tank as described in Conditions 2.2.1 and 2.2.2.

b. This permit is issued based upon affected tank 103 being subject to NESHAP For Benzene Waste Operations, 40 CFR 61, Subpart FF. The Permittee shall comply with all applicable requirements of 40 CFR Part 61 Subpart FF.

   Note: Affected tank 103 has historically been used for storage of material regulated under the requirements of National Emission Standard for Benzene Waste Operations, 40 CFR 61 Subpart FF. This permit allows for the existing affected tank 103 to be operated for the storage of various petroleum products as a result of the CCUP, in addition to being maintained to allow for storage of material regulated under the BWON provisions.

c. The affected tank 103 is subject to 40 CFR 60, Subpart Kb: Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.

Note: The requirements of National Emission Standard for Benzene Waste Operations, 40 CFR 61 Subpart FF allow for compliance pursuant to NSPS Subpart Kb under the alternative standards of 40 CFR 61.351(a)(2).

d. The affected tank 103 is subject to 35 IAC Part 218, Subpart B: Organic Emissions From Storage and Loading Operations.

e. This permit is issued based upon the affected tank 103 being subject to National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries, 40 CFR 63, Subparts A and CC. The Illinois EPA administers the NESHAP for subject sources in Illinois pursuant to a delegation agreement with the USEPA. The Permittee shall comply with all applicable requirements of 40 CFR 63, Subparts A and CC.

Note: Pursuant to 40 CFR 63.640(n)(1), the affected tank 103 is required to comply only with the requirements of 40 CFR Part 60, Subpart Kb, except as provided in 40 CFR 63.640(n)(8).

2.2.4 Non-Applicability of Regulations of Concern

a. This permit is issued based on the affected tanks 231 and 232 not being subject to 35 IAC 218.120 pursuant to 218.119(a) because the affected tanks are only used to store petroleum liquids or liquids with a vapor pressure of less than 0.5 psia.

b. This permit is issued based on the affected tanks 231 and 232 not being subject to 35 IAC 218.121 because the affected tanks are only used to store liquids with a vapor pressure of less than 10.34 kPa (1.5 psia) at 294.3 K (70°F).

c. This permit is issued based on the affected tank 103 not being subject to 35 IAC 218.123: Petroleum Liquid Storage Tanks, because the affected tank 103 is subject to NSPS for storage vessels of petroleum liquid, 40 CFR Part 60, Subpart Kb, pursuant to 35 IAC 218.123(a)(5).

d. This permit is issued based on the affected tank 103 not being subject to 35 IAC 218.124: External Floating Roofs, because the affected tank 103 is exempted under 35 IAC 218.123(a)(5) since the affected tank 103 is subject to new source performance standards for storage vessels of petroleum liquid, 40 CFR Part 60, Subpart Kb, pursuant to 35 IAC 218.124(b)(1).

e. This permit is issued based on the affected tank 103 not being subject to 40 CFR 63.646: Storage Vessel Provisions, because the affected tank 103 is subject to new source performance standards for storage vessels of petroleum liquid, 40 CFR Part 60, Subpart Kb, pursuant to 40 CFR 63.640(n)(1), except as provided by 40 CFR 63.640(n)(8).

f. This permit is issued based on storage tanks 231, 232, 233, 234, 235, and 236 not being subject to the NESHAP for Asphalt Processing and Asphalt Roofing Manufacturing, 40 CFR 63, Subpart LLLLL pursuant to 40 CFR 63.8681(c). These tanks are Group B storage tanks subject to 40 CFR 63 Subpart CC.

2.2.5 Control Requirements and Work Practices

a. The Permittee shall equip the affected tank 103 with an external floating roof. An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. The external floating roof must meet the following specifications [40 CFR 60.112b(a)(2)]:

i. The external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal [40 CFR 60.112b(a)(2)(i)].

A. The primary seal shall be a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall [40 CFR 60.112b(a)(2)(i)(A)].

B. The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4) [40 CFR 60.112b(a)(2)(i)(B)].

1. Storage vessels that are to comply with 40 CFR 60.112b(a)(2) are exempt from the secondary seal requirements of 40 CFR 60.112b(a)(2)(i)(B) during the gap measurements for the primary seal required by 40 CFR 60.113b(b) [40 CFR 63.640(n)(8)(i)].

2. Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents 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. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer' recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening [40 CFR 60.112b(a)(2)(ii)].

3. The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible [40 CFR 60.112b(a)(2)(iii)].

b. The affected tank 103 shall be designed and equipped with a floating roof which rests on the surface of the volatile organic liquid 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 volatile organic liquid 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 218.121(b)(1)].

c. The affected tank 103 shall be equipped with a permanent submerged loading pipe, submerged fill, or an equivalent

device approved by the Agency according to the provisions of 35 Ill. Adm. Code 201 [35 IAC 218.122(b)].

d. i. Tanks 231, 232, and 233 shall be equipped with a vapor collection and control system, i.e., the primary and temporary AVP control system, capable of reducing emissions by 96 percent.

ii. The Permittee shall not commence to load material into Tanks 231, 232, and 233 during an outage of the primary AVPs unless the tanks are properly controlled by the temporary AVP.

iii. In the event the filling of the tank has commenced and there is an outage caused by a malfunction of the AVP, the Permittee shall arrange for proper control by the temporary AVP as soon as practicable and shall comply with the recordkeeping and reporting requirements of Conditions 2.2.9 and 2.2.10.

iv. The Permittee shall conduct maintenance as per manufacturer's recommendation to ensure that each control system (asphalt vent package) on Tanks 231, 232, and 233 works properly. At a minimum, the Permittee shall:

A. Replace the prefilter in accordance with the manufacturer's guidelines for maximum pressure drop across the prefilter; and

B. Replace the mist eliminator in accordance with the manufacturer's guidelines for maximum pressure drop across the mist eliminator.

e. The Permittee shall not store material with a maximum true vapor pressure in excess of 5.5 psia in Storage Tank 103.

2.2.6 <u>Production and Emission Limitations</u>

a. i. Emissions of volatile organic material from tanks 231, 232, 233, 234, 235, 236, the asphalt truck loading facility and the asphalt railcar loading rack shall not exceed 5.1 tons/month and 30.39 tons/year. This condition supersedes Condition 1.1.6(a) established in the Asphalt Railcar Loading Operations Construction Permit (04090004).

The above requirement and the recordkeeping and reporting requirements of Conditions 2.2.9(a), (b) and (c) and 2.2.10(a) become effective when the Permittee begins operation of the Asphalt Vent Packages on Tanks 231 and 232. Until such time, the

requirements of Condition 2.2.6(a) in the Asphalt Railcar Loading Operations Construction Permit (04090004) shall apply.

ii. Emissions of volatile organic material (VOM) from affected tank 103 shall not exceed 3.50 tons/year.

iii. Notwithstanding Condition 2.2.6(a)(i) and (ii), the equipment described in Condition 2.2.6(a)(i) may be operated in excess of the permitted emission rate, as specified below, until Tank 103 is returned to service. After this period, the emission limits in Condition 2.2.6(a)(i) and (ii) will apply.

A. During this period, the emissions from the Tanks 231, 232, 233, 234, 235, 236, the asphalt truck loading facility, and the asphalt railcar loading rack shall not exceed 32.55 tons per year combined.

B. During this period, the recordkeeping requirements (See Condition 2.2.9(c)) shall be used to determine compliance with the emission limits in Condition 2.2.6.

C. The Permittee shall notify the Illinois EPA when Tank 103 is brought back into service.

b. Compliance with the annual limit shall be determined from a running total of 12 months of data.

2.2.7 <u>Testing and Inspection Requirements</u>

a. The Permittee shall fulfill all applicable testing and procedures requirements of 40 CFR 60.113b(b) for the affected tank 103 [40 CFR 60.113b(b)].

i. If the owner or operator determines that it is unsafe to perform the seal gap measurements required in 40 CFR 60.113b(b), 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 seal gap measurements required by 40 CFR 60.113b(b)(1), 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 Administrator [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 tank 103 [40 CFR 60.116b].

2.2.8 Monitoring Requirements

a. For purposes of determining when to replace the mist eliminator, the Permittee shall measure the pressure drop across the mist eliminator of the AVPs associated with Storage Tanks 231 and 232.

2.2.9 Recordkeeping Requirements

a. The Permittee shall maintain a record of the following items:

i. Periods of time when either Tank 231, 232, or 233 was not controlled by a properly operating asphalt vent package;

ii. An estimate of the emissions during each of the periods identified above, with supporting calculations;

iii. For each period identified above, the reason the asphalt vent package was not in operation (planned maintenance, malfunction/breakdown of the AVP, etc.) and any corrective actions taken.

b. The Permittee shall maintain a maintenance log for each asphalt vent package which, at a minimum, includes a record of the filter/mist eliminator replacement and the date of the replacement;

c. VOM emissions, including those emissions during periods when the asphalt vent package(s) are not in operation or operating properly, from tanks 231, 232, 233, 234, 235, 236, the asphalt truck loading facility, and the asphalt railcar loading facility (tons/month and tons/year);

d. The Permittee shall maintain records of the following items to demonstrate compliance with the limits of Conditions 2.2.5(f) and 2.2.6(b):

i. The type, characteristic and quantity of each material stored in Tank 103, including the maximum true vapor pressure;

ii. Actual emissions of VOM emissions from Tank 103, tons/month and tons/year.

e. The Permittee shall fulfill all applicable recordkeeping requirements of 40 CFR 60.115b for the affected tank 103 [40 CFR 60.115b].

2.2.10 Reporting Requirements

a. The Permittee shall promptly notify the Illinois EPA, Air Compliance Unit, of deviations of an affected tank with the permit requirements of this section (2.2). Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken. As certain requirements regarding the operation of affected tank 103 is addressed by reporting requirements under applicable rules, this requirement may be satisfied with the reporting required by such regulations.

b. The Permittee shall fulfill all applicable reporting requirements specified in 40 CFR 60.115b for the affected tank 103 [40 CFR 60.115b].

i. Owners and operators of storage vessels complying with Subpart Kb of Part 60 may submit the inspection reports required by 40 CFR 60.115b(b)(4) as part of the periodic reports required by 40 CFR Part 63, Subpart CC, rather than within the 30-day period specified in 40 CFR 60.115b(b)(4) [40 CFR 63.640(n)(8)(v)].

ii. The reports of rim seal inspections specified in 40 CFR 60.115b(b)(2) are not required if none of the measured gaps or calculated gap areas exceed the limitations specified in 40 CFR 60.113b(b)(4). Documentation of the inspections shall be recorded as specified in 40 CFR 60.115b(b)(3) [40 CFR 63.640(n)(8)(vi)].

c. For affected tank 103, if an extension is utilized in accordance with 40 CFR 63.640(n)(8)(iii), the owner or operator shall, in the next periodic report, identify the vessel, provide the information listed in 40 CFR 60.113b(b)(4)(iii), and describe the nature and date of the repair made or provide the date the storage vessel was emptied [40 CFR 63.640(n)(8)(iv)].

It should be noted that this permit has been revised to authorize installation of a temporary asphalt vent package for control of volatile organic material emissions from Tanks 231, 232, and 233 during periods of time when the primary asphalt vent packages are either not operating or not operating properly.

If you have any questions on this permit, please contact Jason Schnepp at 217/782-2113.

Edwin C. Bakowski, P.E. Date Signed: _____
Acting Manager, Permit Section
Division of Air Pollution Control

ECB:JMS:psj

cc: Region 1
Lotus Notes

Attachment 1

PSD Applicability – SO_2 Netting Analysis

Contemporaneous Time Period: October 2000 Through October 2005

Table I – Project Emissions Increases and Decreases

Item of Equipment	Emission Change (Tons/Year)
1-B-1A	-44.27
1-B-1B	-36.71
1-B-3/13-B-4	43.79
13-B-2	-37.62
16-B-1A, 16-B-1B	33.04
17-B-1	11.61
2-B-3,4,5,6	67.06
3-B-1	12.78
21-B-1	8.59
FCC/SSRU/NSRU	2,424.36
55-B-100	33.00
CCR Vent Gas Wash Tower	3.93
Total:	2,519.56

Table II – Source-Wide Creditable Contemporaneous Emission Increases

Item of Equipment	Date	Emissions (Tons/Year)	Permit Number
FCC Jumpover Line	5/2002	32.23	02030040
Repl. FCC Expander Turbine	10/2003	2.36	02040013
Coker B/D Tank	3/2004	7.02	03060085
Temporary Coker Diesel Pump	12/2004	0.28	04100043
Hydrogen Plant	10/2004	0.56	05020063
uLSD	10/2004	238.87	03110060
	Total:	281.32	

Table III – Source-Wide Creditable Contemporaneous Emission Decreases

Item of Equipment	Date	Emissions (Tons/Year)	Permit Number
Low Sulfur Mogas	10/2003	576.83	01030070
Coker B/D Recovery	9/2004	2,593.00	03060091
	Total:	3,169.83	

Table IV – Net Emissions Change

	(Tons/Year)
Increases and Decreases Associated With Proposed Modification	2,519.56
Creditable Contemporaneous Emission Increases	281.32
Creditable Contemporaneous Emission Decreases	-3,169.83
	-368.95

Attachment 2a

PSD Applicability - NO_x Netting Analysis

Contemporaneous Time Period: October 2000 through October 2005

Table I – Project Emissions Increases and Decreases

Item of Equipment	Emission Change (Tons/Year)
1-B-1A	86.25
1-B-1B	83.14
1-B-3/13-B-4	12.19
13-B-2	71.36
16-B-1A, 16-B-1B	47.11
17-B-1	12.46
2-B-3,4,5,6	69.85
3-B-1	42.19
21-B-1	12.79
CCR Vent Gas Wash Tower	0.00
FCC/CO Boiler/SSRU/NSRU	312.43
55-B-100	46.84
Total:	796.61

Table II – Source-Wide Creditable Contemporaneous Emission Increases

Item of Equipment	Date	Emissions Increase (Tons/Year)	Permit Number
FCC Jumpover Line	5/2002	8.19	02030040
Low Sulfur Mogas	10/2003	39.04	01030070
FCC Expander Turbine	10/2003	12.26	02040013
Coker Blowdown Tank	3/2004	3.21	03060085
Temporary Coker Diesel Pump	12/2004	4.19	04100043
Hydrogen Plant	10/2005	41.88	05020063
uLSD	10/2005	16.45	03110060
	Total:	125.22	

Table III – Source-Wide Creditable Contemporaneous Emission Decreases

Item of Equipment	Date	Emissions Decrease (Tons/Year)	Permit Number
Coker B/D Recovery	11/2004	219.00	03060091

Table IV – Net Emissions Change

	(Tons/Year)
Increases and Decreases Associated With Proposed Modification	796.61
Creditable Contemporaneous Emission Increases	125.22
Creditable Contemporaneous Emission Decreases	-219.00
	702.83

Attachment 2b

Non-attainment NSR Applicability - NO_x Netting Analysis (8-hour Ozone)

Contemporaneous Time Period: March 2000 through October 2005

Table I – Project Emissions Increases and Decreases

Item of Equipment	Emission Change (Tons/Year)
1-B-1A	86.25
1-B-1B	83.14
1-B-3/13-B-4	12.19
13-B-2	71.36
16-B-1A, 16-B-1B	47.11
17-B-1	0.00
2-B-3,4,5,6	0.00
3-B-1	42.19
21-B-1	0.00
CCR Vent Gas Wash Tower	0.00
FCC/CO Boiler/SSRU/NSRU	312.43
55-B-100	0.00
Total:	654.67

Table II – Source-Wide Creditable Contemporaneous Emission Increases

Item of Equipment	Date	Emissions Increase (Tons/Year)	Permit Number
FCC Jumpover Line	5/2002	8.19	02030040
Low Sulfur Mogas	10/2003	39.04	01030070
FCC Expander Turbine	10/2003	12.26	02040013
Coker Blowdown Tank	3/2004	3.21	03060085
Temporary Coker Diesel Pump	12/2004	4.19	04100043
Hydrogen Plant	10/2005	41.88	05020063
uLSD	10/2005	78.48	03110060
	Total:	187.25	

Table III – Source-Wide Creditable Contemporaneous Emission Decreases

Item of Equipment	Date	Emissions Decrease (Tons/Year)	Permit Number
Coker B/D Recovery	11/2004	219.00	03060091

Table IV – Net Emissions Change

	(Tons/Year)
Increases and Decreases Associated With Proposed Modification	654.67
Creditable Contemporaneous Emission Increases	187.25
Creditable Contemporaneous Emission Decreases	-219.00
	622.92

Attachment 3

PSD Applicability - CO Netting Analysis

Contemporaneous Time Period: October 2000 through October 2005

Table I – Project Emissions Increases and Decreases

Item of Equipment	Emission Change (Tons/Year)
1-B-1A	18.96
1-B-1B	19.39
1-B-3/13-B-4	6.02
13-B-2	17.65
16-B-1A, 16-B-1B	9.64
17-B-1	1.44
2-B-3,4,5,6	10.27
3-B-1	7.98
21-B-1	4.80
CCR Vent Gas Wash Tower	1.71
FCC/CO Boiler/SSRU/NSRU	58.31
55-B-100	84.36
Total:	240.53

Table II – Source-Wide Creditable Contemporaneous Emission Increases

Item of Equipment	Date	Emissions Increase (Tons/Year)	Permit Number
FCC Jumpover Line	5/2002	1.69	02030040
Low Sulfur Mogas	10/2003	95.72	01030070
FCC Expander Turbine	10/2003	3.07	02040013
Coker Blowdown Tank	3/2004	0.74	03060085
Temporary Coker Diesel Pump	12/2004	0.90	04100043
Hydrogen Plant	10/2005	32.49	05020063
uLSD	10/2005	14.74	03110060
	Total:	149.35	

Table III – Source-Wide Creditable Contemporaneous Emission Decreases

Item of Equipment	Date	Emissions Decrease (Tons/Year)	Permit Number
Coker B/D Recovery	11/2004	50.00	03060091

Table IV – Net Emissions Change

	(Tons/Year)
Increases and Decreases Associated With Proposed Modification	240.53
Creditable Contemporaneous Emission Increases	149.35
Creditable Contemporaneous Emission Decreases	- 50.00
	339.88

Attachment 4a

PSD Applicability - VOM Netting Analysis

Contemporaneous Time Period: October 2000 through October 2005

Table I – Emissions Increases and Decreases Associated With The Proposed Modification

Item of Equipment	Emission Change (Tons/Year)
1-B-1A	1.89
1-B-1B	1.80
1-B-3/13-B-4	0.50
13-B-2	1.59
16-B-1A, 16-B-1B	1.19
17-B-1	0.00
2-B-3,4,5,6	0.00
3-B-1	0.92
21-B-1	0.00
CCR Vent Gas Wash Tower	0.00
FCC/CO Boiler, SSRU, NSRU	0.31
55-B-100	0.00
Fugitive Components	5.71
Tank 103	2.16
Tank 231 (Asphalt Vent Package)	-5.48
Tank 232 (Asphalt Vent Package)	-5.16
Total:	5.43[a]

[a] 16.07 tons excluding decreases, which is less than significant.

Attachment 4b

Non-attainment NSR Applicability - VOM Netting Analysis (8-hour Ozone)

Contemporaneous Time Period: March 2000 through October 2005

Table I – Emissions Increases and Decreases Associated With The Proposed Modification

Item of Equipment	Emission Change (Tons/Year)
1-B-1A	1.89
1-B-1B	1.80
1-B-3/13-B-4	0.50
13-B-2	1.59
16-B-1A, 16-B-1B	1.19
17-B-1	0.00
2-B-3,4,5,6	0.00
3-B-1	0.92
21-B-1	0.00
CCR Vent Gas Wash Tower	0.00
FCC/CO Boiler, SSRU, NSRU	0.31
55-B-100	0.00
Fugitive Components	5.71
Tank 103	2.16
Tank 231 (Asphalt Vent Package)	-5.48
Tank 232 (Asphalt Vent Package)	-5.16
Total:	5.43[a]

[a] 16.07 tons excluding decreases, which is less than significant.

Attachment 5

PSD Applicability - PM Netting Analysis

Contemporaneous Time Period: October 2000 through October 2005

Table I – Project Emissions Increases and Decreases

Item of Equipment	Emission Change (Tons/Year)
1-B-1A	-1.14
1-B-1B	-1.22
1-B-3/13-B-4	0.51
13-B-2	-6.27
16-B-1A, 16-B-1B	1.12
17-B-1	0.94
2-B-3,4,5,6	4.40
3-B-1	0.88
21-B-1	0.96
CCR Vent Gas Wash Tower	0.30
FCC/CO Boiler/SSRU/NSRU	97.41
55-B-100	4.27
Fugitive Particulate – Coker	6.88
Total:	109.04

Table II – Source-Wide Creditable Contemporaneous Emission Increases

Item of Equipment	Date	Emissions Increase (Tons/Year)	Permit Number
FCC Jumpover Line	5/2002	0.24	02030040
Low Sulfur Mogas	10/2003	12.10	01030070
FCC Expander Turbine	10/2003	0.26	02040013
Coker Blowdown Tank	3/2004	0.44	03060085
Temporary Coker Diesel Pump	12/2004	0.29	04100043
Hydrogen Plant	10/2005	5.00	05020063
uLSD	10/2005	1.08	03110060
	Total:	19.41	

Table III – Source-Wide Creditable Contemporaneous Emission Decreases

Item of Equipment	Date	Emissions Decrease (Tons/Year)	Permit Number
None			

Table IV – Net Emissions Change

	(Tons/Year)
Increases and Decreases Associated With Proposed Modification	109.04
Creditable Contemporaneous Emission Increases	19.41
Creditable Contemporaneous Emission Decreases	0.00
	128.45

Attachment 6

PSD Applicability – PM_{10} Netting Analysis

Contemporaneous Time Period: October 2000 through October 2005

Table I – Project Emissions Increases and Decreases

Item of Equipment	Emission Change (Tons/Year)
1-B-1A	-1.14
1-B-1B	-1.22
1-B-3/13-B-4	0.51
13-B-2	-6.27
16-B-1A, 16-B-1B	1.12
17-B-1	0.94
2-B-3,4,5,6	4.40
3-B-1	0.88
21-B-1	0.96
CCR Vent Gas Wash Tower	0.30
FCC/CO Boiler/SSRU/NSRU	97.41
55-B-100	4.27
Fugitive Particulate – Coker	3.51
Total:	105.67

Table II – Source-Wide Creditable Contemporaneous Emission Increases

Item of Equipment	Date	Emissions Increase (Tons/Year)	Permit Number
FCC Jumpover Line	5/2002	0.24	02030040
Low Sulfur Mogas	10/2003	12.10	01030070
FCC Expander Turbine	10/2003	0.26	02040013
Coker Blowdown Tank	3/2004	0.44	03060085
Temporary Coker Diesel Pump	12/2004	0.29	04100043
Hydrogen Plant	10/2005	5.00	05020063
uLSD	10/2005	1.08	03110060
	Total:	19.41	

Table III – Source-Wide Creditable Contemporaneous Emission Decreases

Item of Equipment	Date	Emissions Decrease (Tons/Year)	Permit Number
None			

Table IV – Net Emissions Change

	(Tons/Year)
Increases and Decreases Associated With Proposed Modification	105.67
Creditable Contemporaneous Emission Increases	19.41
Creditable Contemporaneous Emission Decreases	0.00
	125.08

Attachment 7

Non-Attainment Area NSR Applicability – $PM_{2.5}$ Netting Analysis

Contemporaneous Time Period: December 17, 2004 through October 2005

Table I – Project Emissions Increases and Decreases

Item of Equipment	Emission Change (Tons/Year)
1-B-1A	-1.14
1-B-1B	-1.22
1-B-3/13-B-4	0.51
13-B-2	-6.27
16-B-1A, 16-B-1B	1.12
17-B-1	0.94
2-B-3,4,5,6	4.40
3-B-1	0.88
21-B-1	0.96
CCR Vent Gas Wash Tower	0.30
FCC/CO Boiler/SSRU/NSRU	97.41
55-B-100	4.27
Fugitive Particulate – Coker	3.51
Total:	105.67

Table II – Source-Wide Creditable Contemporaneous Emission Increases

Item of Equipment	Date	Emissions Increase (Tons/Year)	Permit Number
Temporary Coker Diesel Pump	12/2004	0.29	04100043
Hydrogen Plant	10/2005	5.00	05020063
uLSD	10/2005	1.08	03110060
	Total:	6.37	

Table III – Source-Wide Creditable Contemporaneous Emission Decreases

Item of Equipment	Date	Emissions Decrease (Tons/Year)	Permit Number
None			

Table IV – Net Emissions Change

	(Tons/Year)
Increases and Decreases Associated With Proposed Modification	105.67
Creditable Contemporaneous Emission Increases	6.37
Creditable Contemporaneous Emission Decreases	0.00
	112.04

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