# STATE OF MISSISSIPPI AIR POLLUTION CONTROL PERMIT

# AND PREVENTION OF SIGNIFICANT DETERIORATION AUTHORITY TO CONSTRUCT AIR EMISSIONS EQUIPMENT THIS CERTIFIES THAT

Chevron Products Company, Pascagoula Refinery 250 Industrial Road Pascagoula, Mississippi Jackson County

"2007-2009 Pascagoula Refinery Improvements Project (PRIP)"

has been granted permission to construct air emissions equipment to comply with emission limitations, monitoring requirements and other conditions set forth herein. This permit is issued in accordance with the provisions of the Mississippi Air and Water Pollution Control Law (Section 49-17-1 et. seq., Mississippi Code of 1972), and the regulations and standards adopted and promulgated thereunder and under authority granted by the Environmental Protection Agency under 40 CFR 52.01 and 52.21.

MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD

AUTHORIZED SIGNATURE MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY

Issued: May 8, 2007

Modified: March 12, 2008; September 28, 2009; and DEC 0 7 2019 ermit No.: 1280-00058

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# Part I

#### A. GENERAL CONDITIONS

- 1. This permit is for air pollution control purposes only. (Ref.: APC-S-2, Section I.D)
- 2. Any activities not identified in the application are not authorized by this permit. (Ref.: Miss. Code Ann. 49-17-29 1.b)
- 3. The knowing submittal of a permit application with false information may serve as the basis for the Permit Board to void the permit issued pursuant thereto or subject the applicant to penalties for operating without a valid permit pursuant to State Law. (Ref.: APC-S-2, Section II.B.5)
- 4. It is the responsibility of the applicant/permittee to obtain all other approvals, permits, clearances, easements, agreements, etc., which may be required including, but not limited to, all required local government zoning approvals or permits. (Ref.: APC-S-2, Section I.D.6)
- 5. The issuance of a permit does not release the permittee from liability for constructing or operating air emissions equipment in violation of any applicable statute, rule, or regulation of state or federal environmental authorities. (Ref.: APC-S-2, Section II.B.7)
- 6. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit, unless halting or reducing activity would create an imminent and substantial endangerment threatening the public health and safety of the lives and property of the people of this state. (Ref.: APC-S-2, Section II.B.15(a))
- 7. The permit and/or any part thereof may be modified, revoked, reopened, and reissued, or terminated for cause. Sufficient cause for a permit to be reopened shall exist when an air emissions stationary source becomes subject to Title V. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. (Ref.: APC-S-2, Section II.B.15(b))
- 8. The permit does not convey any property rights of any sort, or any exclusive privilege. (Ref.: APC-S-2, Section II.B.15(c))
- 9. The permittee shall furnish to the DEQ within a reasonable time any information the DEQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the DEQ copies of records required to be kept by the permit or, for information claimed to be confidential, the

permittee shall furnish such records to the DEQ along with a claim of confidentiality. The permittee may furnish such records directly to the Administrator along with a claim of confidentiality. (Ref.: APC-S-2, Section II.B.15(d))

- 10. Design and Construction Requirements: The stationary source shall be designed and constructed so as to operate without causing a violation of an Applicable Rules and Regulations, without interfering with the attainment and maintenance of State and National Ambient Air Quality Standards, and such that the emission of air toxics does not result in an ambient concentration sufficient to adversely affect human health and well-being or unreasonably and adversely affect plant or animal life beyond the stationary source boundaries. (Ref.: APC-S-2, Section V.A)
- 11. Solids Removal: The necessary facilities shall be constructed so that solids removed in the course of control of air emissions may be disposed of in a manner such as to prevent the solids from becoming windborne and to prevent the materials from entering State waters without the proper environmental permits. (Ref.: Miss. Code Ann. 49-17-29)
- 12. Diversion and Bypass of Air Pollution Controls: The air pollution control facilities shall be constructed such that diversion from or bypass of collection and control facilities is not needed except as provided for in Regulation APC-S-1, "Air Emission Regulations for the Prevention, Abatement, and Control of Air Contaminants", Section 10. (Ref.: APC-S-1, Section 10)
- 13. Fugitive Dust Emissions from Construction Activities: The construction of the stationary source shall be performed in such a manner so as to reduce fugitive dust emissions from construction activities to a minimum. (Ref.: APC-S-2, Section V.A.4)
- 14. Right of Entry: The permittee shall allow the Mississippi Department of Environmental Quality Office of Pollution Control and the Mississippi Environmental Quality Permit Board and/or their representatives upon presentation of credentials:
  - a) To enter upon the permittee's premises where an air emission source is located or in which any records are required to be kept under the terms and conditions of this permit; and
  - b) At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any air emissions. (Ref.: Miss. Code Ann. 49-17-21)
- 15. Permit Modification or Revocation: After notice and opportunity for a hearing, the Permit Board may modify the permit or revoke it in whole or in part for good cause shown including, but not limited to:

- a) Persistent violation of any of the terms or conditions of this permit;
- b) Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c) A change in federal, state, or local laws or regulations that require either a temporary or permanent reduction or elimination of previously authorized air emission.

(Ref.: APC-S-2, Section II.C)

- 16. Public Record and Confidential Information: Except for data determined to be confidential under the Mississippi Air & Water Pollution Control Law, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Mississippi Department of Environmental Quality, Office of Pollution Control. (Ref.: Miss. Code Ann. 49-17-39)
- 17. Permit Transfer: This permit shall not be transferred except upon approval of the Permit Board. (Ref.: APC-S-2, Section XVI.B)
- 18. Severability: The provisions of this permit are severable. If any provision of the permit, or the application of any provision of the permit to any circumstances, is challenged or held invalid, the validity of the remaining permit provisions and/or portions thereof or their application to other persons or sets of circumstances, shall not be affected thereby. (Ref. APC-S-2, Section I.D.7)
- 19. Permit Expiration: The permit to construct will expire if construction does not begin within eighteen (18) months from the date of issuance or if construction is suspended for eighteen (18) months or more. (Ref.: APC-S-2, Section V.C.1)
- 20. Certification of Construction: A new stationary source issued a Permit to Construct cannot begin operation until certification of construction by the permittee. (Ref.: APC-S-2, Section V.D.3)
- 21. Beginning Operation: Except as prohibited in Part I, Condition 24 of this permit, after certification of construction by the permittee, the Permit to Construct shall be deemed to satisfy the requirement for a permit to operate until the date the application for issuance or modification of the Title V Permit or the application for issuance or modification of the State Permit to Operate, whichever is applicable, is due. This provision is not applicable to a source excluded from the requirement for a permit to operate as provided by APC-S-2, Section XIII.G. (Ref.: APC-S-2, Section V.D.4)
- 22. Application for a Permit to Operate: Except as otherwise specified in Part I, Condition 24 of this permit, the application for issuance or modification of the State Permit to Operate or the Title V Permit, whichever is applicable, is due twelve (12) months after beginning operation or such earlier date or time as specified in the

Permit to Construct. The Permit Board may specify an earlier date or time for submittal of the application. Beginning operation will be assumed to occur upon certification of construction, unless the permittee specifies differently in writing. (Ref.: APC-S-2, Section V.D.5)

- 23. Operating Under a Permit to Construct: Except as otherwise specified in Part I, Condition 24 of this permit, upon submittal of a timely and complete application for issuance or modification of a State Permit to Operate or a Title V Permit, whichever is applicable, the applicant may continue to operate under the terms and conditions of the Permit to Construct and in compliance with the submitted application until the Permit Board issues, modifies, or denies the Permit to Operate. (Ref.: APC-S-2, Section V.D.6)
- 24. Application Requirements for a Permit to Operate for Moderate Modifications: For moderate modifications that require contemporaneous enforceable emissions reductions from more than one emission point in order to "net" out of PSD/NSR, the applicable Title V Permit to Operate or State Permit to Operate must be modified prior to beginning operation of the modified facilities. (Ref.: APC-S-2, Section V.D.7)
- 25. Compliance Testing: Regarding compliance testing:
  - a) The results of any emissions sampling and analysis shall be expressed both in units consistent with the standards set forth in any Applicable Rules and Regulations or this permit and in units of mass per time.
  - b) Compliance testing will be performed at the expense of the permittee.
  - c) Each emission sampling and analysis report shall include but not be limited to the following:
    - (1) detailed description of testing procedures;
    - (2) sample calculation(s);
    - (3) results; and
    - (4) comparison of results to all Applicable Rules and Regulations and to emission limitations in the permit.

(Ref.: APC-S-2, Section VI.B.3, 4, and 6)

# **B.** GENERAL NOTIFICATION REQUIREMENTS

- 1. Within fifteen (15) days of beginning actual construction, the permittee must notify DEQ in writing that construction has begun. (Ref.: APC-S-2, Section V.C.2)
- 2. The permittee must notify DEQ in writing when construction does not begin within eighteen (18) months of issuance or if construction is suspended for eighteen (18) months or more. (Ref.: APC-S-2, Section V.C.3)
- 3. Upon the completion of construction or installation of an approved stationary source or modification, the applicant shall notify the Permit Board that construction or installation was performed in accordance with the approved plans and specifications on file with the Permit Board. (Ref.: APC-S-2, Section V.D.1)
- 4. The Permit Board shall be promptly notified in writing of any change in construction from the previously approved plans and specifications or permit. If the Permit Board determines the changes are substantial, it may require the submission of a new application to construct with "as built" plans and specifications. Notwithstanding any provision herein to the contrary, the acceptance of an "as built" application shall not constitute a waiver of the right to seek compliance penalties pursuant to State Law. (Ref.: APC-S-2, Section V.D.2)

# PART II.A – NEW EMISSION POINTS EMISSION POINT CG-033

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point CG-033, the 7,100-gallon Shell Additive Tank (T-3033) located in Plant 5171, the Pascagoula Marketing Terminal.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

# MACT Subpart EEEE – NESHAP for Organic Liquids Distribution (OLD)

For Emission Point CG-033, the permittee is subject to and shall comply with the *National Emission Standards for Hazardous Air Pollutants (NESHAP): Organic Liquids Distribution* (40 CFR Part 63, Subpart EEEE) and any applicable requirements of the *General Provisions* (40 CFR Part 63, Subpart A). There are no emission standards or work practice standards for this tank, only recordkeeping requirements. (Ref.: 40 CFR 63.2334(a))

For each storage tank with a capacity 5,000 gallons or more that is not subject to control based on the criteria specified in Table 2 to Subpart EEEE, the permittee shall keep documentation, including a record of the annual average true vapor pressure of the total Table 1 organic HAP in the stored organic liquid, that verifies the storage tank is not required to be controlled under Subpart EEEE. The documentation must be kept up-to-date and must be in a form suitable and readily available for expeditious inspection and review according to §63.10(b)(1), including records stored in electronic form in a separate location. (Ref.: 40 CFR 63.2343(b)(3))

#### PART II.A – NEW EMISSION POINTS EMISSION POINT CH-001

Beginning upon permit issuance, the permittee shall comply with the following requirements for Emission Point CH-001, the Continuous Catalyst Regenerator Unit, Plant 79 PRPU Equipment Leaks.

# VALVE AND PUMP REQUIREMENTS

The permittee shall install bellows-seal valves on all valves within Plant 79 of 1.5 inches or less in diameter that are in vapor or light liquid VOC service. The permittee shall install pumps with dry gas seal systems, with an inert barrier gas at higher pressure than the fluid being pumped, or other "leakless" technology. Pumps fitted with dry gas seal systems, or other "leakless" technology, shall be installed in service that is at least 10 percent VOC by weight.

# **EQUIPMENT LEAK DEFINITION**

The permittee shall use the following internal leak definitions for valves, connectors, and pumps in light liquid and/or gas/vapor service, unless specified more stringent in an applicable federal standard:

- (a) No greater than 500 ppmv VOC for each valve and connector, excluding pressure relief devices.
- (b) No greater than 2,000 ppmv VOC for each pump.

#### MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

The permittee shall comply with the monitoring, recordkeeping, and reporting requirements specified in the NSPS Part 60, NESHAP Part 61, and/or MACT Part 63 standards applicable to each process area, or plant, within the refinery.

In addition to the applicable federal requirements, the permittee shall monitor the connectors in Plant 79 for leaks once per calendar year. Those connectors meeting the definition of inaccessible or unsafe-to-monitor, as defined in §63.174, are excluded. If the percentage of leaking connectors is less than 1 percent, the connector monitoring may be reduced to once every two years. If the percentage of leaking connectors is less than 0.5 percent, the connector monitoring may be reduced to once every four years.

# PART II.A – NEW EMISSION POINTS EMISSION POINT CH-003

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point CH-003, four Platformer Feed/Interstage Heaters (Ref. F-7910, F-7920, F-7930, F-7940) with a total heat input of 850 MMBtu/hr routed to a common stack. These heaters are located in Plant 79, the Continuous Catalyst Regeneration (CCR) Unit. The heaters are equipped with Ultra Low-NO<sub>x</sub> Burners for the reduction of NO<sub>x</sub> emissions.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

Sulfur Dioxide	52.24 lb/hr (24-hr rolling average) and 118.99 tons/year (12-month rolling total)
Nitrogen Oxides	0.030 lb/MMBtu (12-month rolling average), not to exceed 38.25 lb/hr (3-hr rolling average) and 111.69 tons/year (12- month rolling total)
Carbon Monoxide	50 ppmvd @ 3% $O_2$ (12-month rolling average), not to exceed 132.60 lb/hr (3-hr rolling average) and 130.31 tons/year (12-month rolling total)

# **EMISSIONS LIMITS**<sup>1,2</sup>

<sup>1</sup> These emission limits are combined limits on the common stack for the four heaters.

<sup>2</sup> Per APC-S-1, Section 10.2(a)(2), emissions limitations applicable to normal operation apply during startups and shutdowns except when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons.

# **FUEL RESTRICTION**

Fuels other than refinery fuel gas and natural gas are prohibited.

# AIR POLLUTION CONTROL EQUIPMENT

During startups, shutdowns, and malfunctions, the permittee shall operate the Ultra Low-NO<sub>x</sub> Burners in accordance with the manufacturer's specifications. The manufacturer's

specifications shall be maintained on site and made available for review by DEQ personnel.

# NSPS Subpart Ja – Petroleum Refineries

(EPA has stayed 40 CFR 102a(g) until further notice. Many of the conditions stated below that are derived from the NSPS Ja regulations are only applicable if the stay is released and the regulatory language remains the same.)

For Emission Point CH-003, the permittee is subject to and shall comply with the *New Source Performance Standards for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007* (40 CFR Part 60, Subpart Ja) and the applicable *General Provisions* (40 CFR Part 60, Subpart A). The permittee shall comply with the emission limitations of this subpart on or after the date on which the initial performance test, required by §60.8, is completed, but not later than 60 days after achieving the maximum production rate at which the affected facility will be operated, or 180 days after initial startup, whichever comes first. (Ref.: 40 CFR 60.100a and 60.102a(a))

# Sulfur Dioxide/H<sub>2</sub>S Standard:

The permittee shall not burn in any fuel gas combustion device any fuel that contains  $H_2S$  in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and  $H_2S$  in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis. (Ref.: 40 CFR 60.102a(g)(1)(ii))

#### Nitrogen Oxides Standard:

The permittee shall not discharge to the atmosphere any emissions of  $NO_x$  in excess of 40 ppmv (dry basis, corrected to 0 percent excess air) on a 24-hour rolling average basis. (Ref.: 40 CFR 60.102a(g)(2))

#### Work Practice Standard:

The permittee shall conduct a root cause analysis of any emission limit exceedance or process start-up, shutdown, upset, or malfunction that causes a discharge to the atmosphere in excess of 227 kg/day (500 lb/day) of SO<sub>2</sub>. For any root cause analysis performed, the permittee shall record the identification of the affected facility, the date and duration of the discharge, the results of the root cause analysis, and the action taken as a result of the root cause analysis. (Ref.: 40 CFR 60.103a(b))

# **INITIAL COMPLIANCE DEMONSTRATION**

Within 60 days after achieving the maximum production rate at which Emission Point CH-003 will be operated, but not later than 180 days after initial startup of CH-003, the permittee shall demonstrate initial compliance with the emission limits and standards for the following pollutants by stack testing in accordance with the specified method(s).

Sulfur Dioxide	EPA Test Method 6 or 6C
	(40 CFR Part 60, Appendix A)
Nitrogen Oxides	EPA Test Method 7, 7A, or 7E
	(40 CFR Part 60, Appendix A)
Carbon Monoxide	EPA Test Method 10A
	(40 CFR Part 60, Appendix A)

All test methods specified above shall be those versions, or their approved equivalents, which are in effect upon permit issuance.

For the purpose of demonstrating initial compliance, the permittee shall operate all four heaters as close to their maximum rated capacity as operating conditions allow.

The permittee shall submit a test protocol at least thirty (30) days prior to the scheduled test date to ensure that all test methods and procedures are acceptable to the DEQ. The DEQ must be notified at least ten (10) days prior to the scheduled test date so that an observer may be scheduled to witness the test(s).

#### **MONITORING REQUIREMENTS**

#### **Sulfur Dioxide:**

To demonstrate compliance with the lb/hr and tons/year  $SO_2$  emission limits, the permittee shall perform the following monitoring:

The permittee shall install, operate, calibrate, and maintain an instrument for continuously monitoring and recording the concentration by volume (dry basis) of H<sub>2</sub>S in the fuel gases before being burned in any fuel gas combustion device. The permittee shall install, operate, and maintain each H<sub>2</sub>S monitor in accordance with §60.107a(a)(2)(i)-(iii). Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H<sub>2</sub>S in the fuel gas being burned. (Ref.: 40 CFR 60.107a(a)(2) or the applicable NSPS Ja requirements upon removal of the stay)

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for total sulfur content. The permittee shall also monitor the amount of fuel combusted each hour.

# Nitrogen Oxides:

To demonstrate compliance with the NO<sub>x</sub> emission limit in NSPS Ja, the permittee shall install, operate, calibrate, and maintain an instrument for continuously monitoring and recording the concentration (dry basis, 0 percent excess air) or NO<sub>x</sub> emissions into the atmosphere. The monitor must include and O<sub>2</sub> monitor for correcting the data for excess air. The permittee shall comply with the monitor requirements of 60.107a(c)(1)-(5). Excess emissions are defined as all rolling 24-hour periods during which the average concentration of NO<sub>x</sub>, as measured by the NO<sub>x</sub> continuous monitoring system, exceeds 40 ppmv. (Ref.: 40 CFR 60.107a(c) or the applicable NSPS Ja requirements upon removal of the stay)

To demonstrate compliance with the NO<sub>x</sub> emission limits expressed as lb/MMBtu, lb/hr, and tons/year, the permittee shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for monitoring and recording the concentration by volume of NO<sub>x</sub> emissions to the atmosphere. The CEMS shall meet the applicable performance specifications required by 40 CFR Part 60, Appendix B, the applicable quality assurance procedures required in 40 CFR Part 60, Appendix F, and the requirements of 40 CFR §60.13. In lieu of the requirements of 40 CFR Part 60, Appendix F §§5.1.1, 5.1.3, and 5.1.4, Chevron may conduct either a Relative Accuracy Audit (RAA) or a Relative Accuracy Test Audit (RATA) on each CEMS at least once every three (3) years. Chevron shall conduct Cylinder Gas Audits (CGA) each calendar quarter during which a RAA or a RATA is not performed.

#### **Carbon Monoxide:**

To demonstrate compliance with the CO emission limits expressed as ppmvd, lb/hr, and tons/year, the permittee shall install, calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) for monitoring and recording the concentration by volume (dry basis) of CO and O<sub>2</sub> emissions to the atmosphere. The CO and O<sub>2</sub> CEMS shall meet the applicable performance specifications required by 40 CFR Part 60, Appendix B, the applicable quality assurance procedures required in 40 CFR Part 60, Appendix F, and the requirements of 40 CFR §60.13. In lieu of the requirements of 40 CFR Part 60, Appendix F §§5.1.1, 5.1.3, and 5.1.4, Chevron may conduct either a Relative Accuracy Audit (RAA) or a Relative Accuracy Test Audit (RATA) on each CEMS at least once every three (3) years. Chevron shall conduct Cylinder Gas Audits (CGA) each calendar quarter during which a RAA or a RATA is not performed.

# **RECORDKEEPING REQUIREMENTS**

In accordance with Condition 1 of Part III, the permittee shall record the following information.

#### Sulfur Dioxide:

The permittee shall maintain records of the following:

- (a) The hourly fuel rate (MMscf/hr) and the monthly total amount of fuel combusted and the total amount of fuel combusted per year (MMscf/yr) determined on a 12-month rolling total.
- (b) The calculated 24-hour average SO<sub>2</sub> emission rate in lb/hr and the 12month rolling SO<sub>2</sub> emission total in tons/year, calculated monthly.
- (c) Each operating day the calculated SO<sub>2</sub> emission rate exceeds the emission rate established in this permit, the magnitude of the excess emissions, the reason for the excess emissions, and a description of the corrective action or preventive measures taken. Corrective action may include a requirement for additional stack testing or more frequent monitoring or could trigger the implementation of a corrective action plan.
- (d) Any compliance test reports or quality assurance checks for the  $H_2S$  monitoring system.
- (e) Calculations, data, and a description of the method(s) used to determine the SO<sub>2</sub> data and the SO<sub>2</sub> emission rates.

#### Nitrogen Oxides:

The permittee shall maintain records of the following:

- (a) All CEMS data.
- (b) The rolling 3-hour average  $NO_x$  emissions calculated hourly in units of lb/hr.
- (c) The rolling 12-month NO<sub>x</sub> emissions calculated monthly in units of lb/MMBtu and tons/year.

#### **Carbon Monoxide:**

The permittee shall maintain records of the following:

- (a) All CEMS data.
- (b) The rolling 3-hour average CO emissions calculated hourly in units of lb/hr.
- (c) The rolling 12-month CO emissions calculated monthly in units of ppmvd corrected to 3% O<sub>2</sub> and tons/year.

# PART II.A – NEW EMISSION POINTS EMISSION POINT CH-004

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point CH-004, the Continuous Catalyst Regenerator Vent located in Plant 79, the Continuous Catalyst Regeneration (CCR) Unit. Emissions from the CCR Vent are controlled with a gas-solid adsorption system, for removal of HCl, and a residual contaminant removal system, for removal of dioxins.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

# **EMISSIONS LIMITS**

Nitrogen Oxides	0.084 lb/hr (3-hr rolling average) and 0.37 tons/year (12-month rolling total)
Carbon Monoxide	0.97 lb/hr (3-hr rolling average) and 4.24 tons/year (12-month rolling total)

# <u>MACT SUBPART UUU – Petroleum Refineries: Catalytic Cracking Units,</u> <u>Catalytic Reforming Units, and Sulfur Recovery Units</u>

*Inorganic HAP Emission Limit:* The permittee shall reduce uncontrolled emissions of HCl by 97 percent by weight or to a concentration of 10 ppmv (dry basis), corrected to 3 percent oxygen. (Ref.: §63.1567(a)(1) and Table 22 to Subpart UUU of Part 63)

The daily average temperature of the gas entering or exiting the adsorption system must not exceed the limit established during the performance test, and the weekly average chloride level on the sorbent entering and leaving the system must not exceed the design or manufacturer's recommended limit. (Ref.: §63.1567(a)(2) and Table 23 to Subpart UUU of Part 63)

The permittee shall prepare an operation, maintenance and monitoring plan according to the requirements in 63.1574(f) and operate at all times according to the procedures in the plan. (Ref.: 63.1567(a)(3)

# **OPERATIONAL REQUIREMENTS**

The permittee shall operate the residual contaminant removal system at all times when catalyst regeneration byproducts are vented except when maintenance to the residual contaminant removal system is necessary and must take place prior to a regularly scheduled shutdown of the CCR Unit. When maintenance is being performed on the

residual contaminant removal system, the permittee may bypass the system and vent emissions directly to the atmosphere.

# **INITIAL COMPLIANCE DEMONSTRATION**

Within 60 days after achieving the maximum production rate at which Emission Point CH-004 will be operated, but not later than 180 days after initial startup of CH-004, the permittee shall demonstrate initial compliance with the emission limits and standards for the following pollutants by stack testing in accordance with the specified method(s).

Nitrogen Oxides	EPA Test Method 7 or 7E
	(40 CFR Part 60, Appendix A)
Carbon Monoxide	EPA Test Method 10 or 10B
	(40 CFR Part 60, Appendix A)

All test methods specified above shall be those versions, or their approved equivalents, which are in effect upon permit issuance.

For the purpose of demonstrating initial compliance, the permittee shall operate the CCR Unit as close to its maximum rated capacity as operating conditions allow.

The permittee shall submit a test protocol at least thirty (30) days prior to the scheduled test date to ensure that all test methods and procedures are acceptable to the DEQ. The DEQ must be notified at least ten (10) days prior to the scheduled test date so that an observer may be scheduled to witness the test(s).

The permittee shall demonstrate initial compliance in accordance with §63.1567(b).

# **MONITORING REQUIREMENTS**

*Indicator Range:* Within 180 days of commencing operation of the CCR Unit, the permittee shall submit a plan for monitoring the performance of the residual contaminant removal system. The plan shall include the parameter(s) to be monitored, the rationale for selection of the parameter(s), and the parameter indicator range, or other value(s), that assure proper operation of the system. This plan, or components therein, shall be incorporated into the operating permit.

*HCl (Surrogate for Inorganic HAP):* The permittee shall install and operate a continuous parameter monitoring system to measure and record the temperature of the gas entering or exiting the adsorption system during coke burn-off and catalyst rejuvenation. (Ref.: §63.1567(b)(1) and Table 24 to Subpart UUU of Part 63)

# **RECORDKEEPING AND REPORTING**

The permittee shall comply with all of the applicable recordkeeping, notification, and reporting requirements expressed in §63.1574, §63.1575, and §63.1576.

#### PART II.A – NEW EMISSION POINTS EMISSION POINT CH-901

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point CH-901, the 2500-gallon Perchloroethylene (PERC) Tank (T-7901) located in Plant 79, the Continuous Catalyst Regeneration (CCR) Unit.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

# MACT Subpart EEEE – NESHAP for Organic Liquids Distribution (OLD)

For Emission Point CH-901, the permittee is subject to and shall comply with the *National Emission Standards for Hazardous Air Pollutants (NESHAP): Organic Liquids Distribution* (40 CFR Part 63, Subpart EEEE) and any applicable requirements of the *General Provisions* (40 CFR Part 63, Subpart A). There are no emission standards or work practice standards for this tank, only recordkeeping requirements. (Ref.: 40 CFR 63.2334(a))

For each storage tank with a capacity less than 5,000 gallons, the permittee must keep documentation that verifies that each tank is not required to be controlled. The documentation must be kept up-to-date and must be in a form suitable and readily available for expeditious inspection and review according to §63.10(b)(1), including records stored in electronic form in a separate location. The documentation may consist of identification of the tanks on a plant site plan or process and instrumentation diagram. (Ref.: 40 CFR 63.2343(a))

#### PART II.A – NEW EMISSION POINTS EMISSION POINT CI-001

Beginning upon permit issuance, the permittee shall comply with the following requirements for Emission Point CI-001, the Reformate Splitter Unit, Plant 80 PRPU Equipment Leaks.

# VALVE AND PUMP REQUIREMENTS

The permittee shall install bellows-seal valves on all valves within Plant 80 of 1.5 inches or less in diameter that are in vapor or light liquid VOC service. The permittee shall install pumps with dry gas seal systems, with an inert barrier gas at higher pressure than the fluid being pumped, or other "leakless" technology. Pumps fitted with dry gas seal systems, or other "leakless" technology, shall be installed in service that is at least 10 percent VOC by weight.

# **EQUIPMENT LEAK DEFINITION**

The permittee shall use the following internal leak definitions for valves, connectors, and pumps in light liquid and/or gas/vapor service, unless specified more stringent in an applicable federal standard:

- (a) No greater than 500 ppmv VOC for each valve and connector, excluding pressure relief devices.
- (c) No greater than 2,000 ppmv VOC for each pump.

#### MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

The permittee shall comply with the monitoring, recordkeeping, and reporting requirements specified in the NSPS Part 60, NESHAP Part 61, and/or MACT Part 63 standards applicable to each process area, or plant, within the refinery.

In addition to the applicable federal requirements, the permittee shall monitor the connectors in Plant 80 for leaks once per calendar year. Those connectors meeting the definition of inaccessible or unsafe-to-monitor, as defined in §63.174, are excluded. If the percentage of leaking connectors is less than 1 percent, the connector monitoring may be reduced to once every two years. If the percentage of leaking connectors is less than 0.5 percent, the connector monitoring may be reduced to once every four years.

# PART II.A – NEW EMISSION POINTS EMISSION POINT CI-003

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point CI-003, the Reformate Splitter Furnace (Ref. F-8007) with a total heat input of 160 MMBtu/hr. The furnace is located in Plant 80, the Reformate Splitter Unit. The furnace is equipped with Ultra Low-NO<sub>x</sub> Burners for the reduction of NO<sub>x</sub> emissions.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

Sulfur Dioxide	9.83 lbs/hr (24-hr rolling average) and 22.40 tons/year (12-month rolling total)
Nitrogen Oxides	0.030 lb/MMBtu (12-month rolling average), not to exceed 7.20 lbs/hr (3-hr rolling average) and 21.02 tons/year (12- month rolling total)
Carbon Monoxide	50 ppmvd @ 3% $O_2$ (12-month rolling average), not to exceed 24.96 lbs/hr (3-hr rolling average) and 24.53 tons/year (12-month rolling total)

# **EMISSIONS LIMITS**<sup>1</sup>

<sup>1</sup> Per APC-S-1, Section 10.2(a)(2), emissions limitations applicable to normal operation apply during startups and shutdowns except when a startup or shutdown is infrequent, the duration of excess emissions is brief in each event, and the design of the source is such that the period of excess emissions cannot be avoided without causing damage to equipment or persons.

# **FUEL RESTRICTION**

Fuels other than refinery fuel gas and natural gas are prohibited.

# AIR POLLUTION CONTROL EQUIPMENT

During startups, shutdowns, and malfunctions, the permittee shall operate the Ultra Low- $NO_x$  Burners in accordance with the manufacturer's specifications. The manufacturer's specifications shall be maintained on site and made available for review by DEQ personnel.

# NSPS Subpart Ja – Petroleum Refineries

(EPA has stayed 40 CFR 102a(g) until further notice. Many of the conditions stated below that are derived from the NSPS Ja regulations are only applicable if the stay is released and the regulatory language remains the same.)

For Emission Point CI-003, the permittee is subject to and shall comply with the *New Source Performance Standards for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007* (40 CFR Part 60, Subpart Ja) and the applicable *General Provisions* (40 CFR Part 60, Subpart A). The permittee shall comply with the emission limitations of this subpart on or after the date on which the initial performance test, required by §60.8, is completed, but not later than 60 days after achieving the maximum production rate at which the affected facility will be operated, or 180 days after initial startup, whichever comes first. (Ref.: 40 CFR 60.100a and 60.102a(a))

# Sulfur Dioxide/H<sub>2</sub>S Standard:

The permittee shall not burn in any fuel gas combustion device any fuel that contains  $H_2S$  in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and  $H_2S$  in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis. (Ref.: 40 CFR 60.102a(g)(1)(ii))

#### Nitrogen Oxides Standard:

The permittee shall not discharge to the atmosphere any emissions of  $NO_x$  in excess of 40 ppmv (dry basis, corrected to 0 percent excess air) on a 24-hour rolling average basis. (Ref.: 40 CFR 60.102a(g)(2))

#### Work Practice Standard:

The permittee shall conduct a root cause analysis of any emission limit exceedance or process start-up, shutdown, upset, or malfunction that causes a discharge to the atmosphere in excess of 227 kg/day (500 lb/day) of SO<sub>2</sub>. For any root cause analysis performed, the permittee shall record the identification of the affected facility, the date and duration of the discharge, the results of the root cause analysis, and the action taken as a result of the root cause analysis. (Ref.: 40 CFR 60.103a(b))

# **INITIAL COMPLIANCE DEMONSTRATION**

Within 60 days after achieving the maximum production rate at which Emission Point CI-003 will be operated, but not later than 180 days after initial startup of CI-003, the permittee shall demonstrate initial compliance with the emission limits and standards for the following pollutants by stack testing in accordance with the specified method(s).

Sulfur Dioxide	EPA Test Method 6 or 6C
	(40 CFR Part 60, Appendix A)

Nitrogen Oxides	EPA Test Method 7, 7A, or 7E
	(40 CFR Part 60, Appendix A)
Carbon Monoxide	EPA Test Method 10A
	(40 CFR Part 60, Appendix A)

All test methods specified above shall be those versions, or their approved equivalents, which are in effect upon permit issuance.

For the purpose of demonstrating compliance, the permittee shall operate the emission unit as close to its maximum rated capacity as operating conditions allow.

The permittee shall submit a test protocol at least thirty (30) days prior to the scheduled test date to ensure that all test methods and procedures are acceptable to the DEQ. The DEQ must be notified at least ten (10) days prior to the scheduled test date so that an observer may be scheduled to witness the test(s).

# **MONITORING REQUIREMENTS**

#### Sulfur Dioxide:

To demonstrate compliance with the lb/hr and tons/year  $SO_2$  emission limits, the permittee shall perform the following monitoring:

The permittee shall install, operate, calibrate, and maintain an instrument for continuously monitoring and recording the concentration by volume (dry basis) of H<sub>2</sub>S in the fuel gases before being burned in any fuel gas combustion device. The permittee shall install, operate, and maintain each H<sub>2</sub>S monitor in accordance with §60.107a(a)(2)(i)-(iii). Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H<sub>2</sub>S in the fuel gas being burned. (Ref.: 40 CFR 60.107a(a)(2) or the applicable NSPS Ja requirements upon removal of the stay)

The permittee shall collect weekly fuel samples in an as-fired condition and analyze for total sulfur content. The permittee shall also monitor the amount of fuel combusted each hour.

#### Nitrogen Oxides:

To demonstrate compliance with the NO<sub>x</sub> emission limit in NSPS Ja, the permittee shall install, operate, calibrate, and maintain an instrument for continuously monitoring and recording the concentration (dry basis, 0 percent excess air) or NO<sub>x</sub> emissions into the atmosphere. The monitor must include and O<sub>2</sub> monitor for correcting the data for excess air. The permittee shall comply with the monitor requirements of 60.107a(c)(1)-(5). Excess emissions are defined as all rolling 24-hour periods during which the average concentration of NO<sub>x</sub>, as measured by the NO<sub>x</sub> continuous monitoring system, exceeds 40

ppmv. (Ref.: 40 CFR 60.107a(c) or the applicable NSPS Ja requirements upon removal of the stay)

To demonstrate compliance with the NO<sub>x</sub> emission limits expressed as lb/MMBtu, lb/hr, and tons/year, the permittee shall install, calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) for monitoring and recording the concentration by volume of NO<sub>x</sub> emissions to the atmosphere. The CEMS shall meet the applicable performance specifications required by 40 CFR Part 60, Appendix B, the applicable quality assurance procedures required in 40 CFR Part 60, Appendix F, and the requirements of 40 CFR §60.13. In lieu of the requirements of 40 CFR Part 60, Appendix F §§5.1.1, 5.1.3, and 5.1.4, Chevron may conduct either a Relative Accuracy Audit (RAA) or a Relative Accuracy Test Audit (RATA) on each CEMS at least once every three (3) years. Chevron shall conduct Cylinder Gas Audits (CGA) each calendar quarter during which a RAA or a RATA is not performed.

#### **Carbon Monoxide:**

To demonstrate compliance with the CO emission limits expressed as ppmvd, lb/hr, and tons/year, the permittee shall install, calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) for monitoring and recording the concentration by volume (dry basis) of CO and O<sub>2</sub> emissions to the atmosphere. The CO and O<sub>2</sub> CEMS shall meet the applicable performance specifications required by 40 CFR Part 60, Appendix B, the applicable quality assurance procedures required in 40 CFR Part 60, Appendix F, and the requirements of 40 CFR §60.13. In lieu of the requirements of 40 CFR Part 60, Appendix F §§5.1.1, 5.1.3, and 5.1.4, Chevron may conduct either a Relative Accuracy Audit (RAA) or a Relative Accuracy Test Audit (RATA) on each CEMS at least once every three (3) years. Chevron shall conduct Cylinder Gas Audits (CGA) each calendar quarter during which a RAA or a RATA is not performed.

# **RECORDKEEPING REQUIREMENTS**

In accordance with Condition 1 of Part III, the permittee shall record the following information.

#### Sulfur Dioxide:

The permittee shall maintain records of the following:

- (a) The hourly fuel rate (MMscf/hr) and the monthly total amount of fuel combusted and the total amount of fuel combusted per year (MMscf/yr) determined on a 12-month rolling total.
- (b) The calculated 24-hour average SO<sub>2</sub> emission rate in lb/hr and the 12month rolling SO<sub>2</sub> emission total in tons/year, calculated monthly.
- (c) Each operating day the calculated SO<sub>2</sub> emission rate exceeds the emission rate established in this permit, the magnitude of the excess emissions, the reason for the excess emissions, and a description of the corrective action

or preventive measures taken. Corrective action may include a requirement for additional stack testing or more frequent monitoring or could trigger the implementation of a corrective action plan.

- (d) Any compliance test reports or quality assurance checks for the  $H_2S$  monitoring system.
- (e) Calculations, data, and a description of the method(s) used to determine the SO<sub>2</sub> data and the SO<sub>2</sub> emission rates.

# Nitrogen Oxides:

The permittee shall maintain records of the following:

- (a) All CEMS data.
- (b) The rolling 3-hour average  $NO_x$  emissions calculated hourly in units of lb/hr.
- (c) The rolling 12-month NO<sub>x</sub> emissions calculated monthly in units of lb/MMBtu and tons/year.

# **Carbon Monoxide:**

The permittee shall maintain records of the following:

- (a) All CEMS data.
- (b) The rolling 3-hour average CO emissions calculated hourly in units of lb/hr.
- (c) The rolling 12-month CO emissions calculated monthly in units of ppmvd corrected to 3% O<sub>2</sub> and tons/year.

# PART II.A – NEW EMISSION POINTS EMISSION POINT AE-004

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point AE-004, the Crude I Cooling Tower (Ref.: E-1101), located in the Crude I Unit (Plant 11). This cooling tower further cools water from No. 1 Cooling Tower (Ref.: E-3601). Emission Point AE-004 is equipped with high-efficiency drift eliminators to reduce particulate emissions.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

# **EMISSION LIMIT**

Volatile Organic Compounds

0.7 lb/MM gal of circulated water (12month rolling average), not to exceed 1.84 tons/year (12-month rolling total)

# AIR POLLUTION CONTROL EQUIPMENT

The permittee shall equip Emission Point AE-004 with high-efficiency drift eliminators guaranteed by the manufacturer for a total liquid drift not to exceed 0.001 percent of the circulating water flow rate.

# MONITORING REQUIREMENTS

The permittee shall perform monthly monitoring of the VOC content at the common header to the cooling tower per an EPA-approved test method for strippable VOC's listed in 40 CFR Part 136 or an approved alternative. The test method shall have a minimum detection level of no greater than 10 ppbw. The permittee shall assume that all of the VOC's are stripped from the inlet water, unless the permittee chooses to also perform concurrent monthly monitoring of the outlet water to demonstrate compliance with the emission limitations. The permittee shall take a minimum of three sets of samples at the header and outlet (if applicable) and average the resulting concentrations.

If after 12 consecutive months of VOC monitoring, no strippable VOC's are detected in the inlet water, the frequency of monitoring may be reduced to quarterly. If after 4 consecutive quarters of VOC monitoring, no strippable VOC's are detected in the inlet water, the frequency of monitoring may be reduced to yearly. Should any quarterly or yearly monitoring result in a strippable VOC concentration above the detection limit, the permittee shall resume monthly monitoring for at least 12 consecutive months as set forth above.

Within 180 days after initial startup of the cooling tower, the permittee shall implement and submit to DEQ a written plan for establishing the VOC concentration that indicates a leak, which shall be no greater than 84 ppbw, and for determining the location of the source(s) of the leak. The plan shall also specify a schedule for repairing the leak(s) at the earliest opportunity, but no later than the next scheduled shutdown of the process unit(s) in which the leak(s) occurs.

The permittee shall continuously monitor the total inlet water flow rate to the cooling tower in gallons per minute.

# **RECORDKEEPING REQUIREMENTS**

The permittee shall record the monthly average VOC concentration and the total monthly cooling water flow, as well as the monthly VOC emission rate in lb/MM gal of circulated water and tons/year. The 12-month rolling total VOC emission rate for each month shall be calculated by summing the average VOC concentration measured for each month of the 12-month period multiplied by the total cooling water flow for that month.

The permittee shall retain records of the design and manufacturer-guaranteed maximum total liquid drift of the cooling tower. These records shall be maintained on site and made available for review by DEQ personnel.

# **REPORTING REQUIREMENTS**

In accordance with Condition 3 of Part III, the permittee shall report the 12-month rolling VOC emission rate in lb/MM gal of circulated water and tons/year for each month of the semiannual reporting period.

# PART II.A – NEW EMISSION POINTS TEMPORARY COOLING TOWERS

Beginning March 12, 2008, the permittee is authorized to construct air emissions equipment and emit air contaminants from eight (8) temporary cooling towers for the High Sulfur Fuel Oil Blending Project. These cooling towers will be located in the Black Oil Storage Area of the Blending Unit (Plant 34). The cooling towers are equipped with high-efficiency drift eliminators to reduce particulate emissions and have a total capacity of 28,800 gallons per minute (gpm) of cooling water.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

# **EMISSION LIMIT**

Volatile Organic Compounds

2.65 tons/year

# **OPERATING RESTRICTION**

The permittee shall not operate the cooling towers more than six (6) months over any 12month period.

# MONITORING REQUIREMENTS

The permittee shall perform monthly monitoring of the VOC content at the common header to the cooling towers per an EPA-approved test method for strippable VOC's listed in 40 CFR Part 136 or an approved alternative. The test method shall have a minimum detection level of no greater than 10 ppbw. The permittee shall assume that all of the VOC's are stripped from the inlet water, unless the permittee chooses to also perform concurrent monthly monitoring of the outlet water to demonstrate compliance with the emission limitations. The permittee shall take a minimum of three sets of samples at the header and outlet (if applicable) and average the resulting concentrations.

The permittee shall continuously monitor the total inlet water flow rate to the cooling towers in gallons per minute.

#### **RECORDKEEPING REQUIREMENTS**

The permittee shall record the monthly average VOC concentration and the total monthly cooling water flow, as well as the monthly VOC emission rate in tons. The permittee shall also record the date the cooling towers are brought on site, the date of startup, the

total time the cooling towers operated, and the date the cooling towers were removed from service

# **REPORTING REQUIREMENTS**

In accordance with Condition 3 of Part III, the permittee shall report the date the cooling towers are brought on site, the date of startup, the total time the cooling towers operated, and the date the cooling towers were removed from service. Upon ceasing operation of the cooling towers, the permittee shall report the total VOC emissions in tons/year.

# PART II.A – NEW EMISSION POINTS EMISSION POINT AE-005

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point AE-005, the portable, diesel-fired Crude I Generator, supplying energy to the Crude I Unit (Plant 11) seasonal cooling towers. The generator is equipped with Selective Catalytic Reduction (SCR) for the removal of  $NO_x$  emissions.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

# **EMISSIONS LIMITS**

Nitrogen Oxides

90% NO<sub>x</sub> reduction, not to exceed 1.30 lb/hr (3-hr rolling average)

Carbon Monoxide

2.16 lb/hr (3-hr rolling average)

# **OPERATIONAL REQUIREMENTS**

The permittee shall not operate the portable Crude I Generator more than nine (9) months (or 270 days) in a calendar year and shall not operate the Crude I Generator beyond calendar year 2009. The Crude I Generator shall not remain on site more than 12 consecutive months.

The permittee shall operate the SCR at all times when the portable Crude 1 Generator is operating. The permittee shall operate the SCR in accordance to the supplier's specifications.

# **INITIAL COMPLIANCE DEMONSTRATION**

Within 15 days of bringing the portable Crude I Generator on site, the permittee shall submit written notification to DEQ providing a supplier's guarantee that the emission rates from the generator will be at or below the permitted emission limits. This guarantee must be the result of performance tests of the actual generator, as documented from the supplier. Should the supplier not guarantee these rates, the permittee shall perform stack testing within 60 days of bringing the generator on site to demonstrate compliance with the emission limits.

Stack testing shall be conducted for  $NO_x$  and CO in accordance with EPA Test Methods 7, 7A, or 7E and 10A, respectively. For the purpose of demonstrating compliance, the

permittee shall operate the generator as close to its maximum rated capacity as operating conditions allow.

The permittee shall submit a test protocol at least thirty (30) days prior to the scheduled test date to ensure that all test methods and procedures are acceptable to the DEQ. The DEQ must be notified at least ten (10) days prior to the scheduled test date so that an observer may be scheduled to witness the test(s).

# **MONITORING REQUIREMENTS**

The permittee shall continuously monitor the ammonia injection rate. The ammonia injection rate shall be no less than the minimum injection rate established during the supplier's  $NO_x$  performance test of the SCR conducted prior to bringing the generator and SCR on site, based on a rolling 3-hour average.

# **RECORDKEEPING REQUIREMENTS**

The permittee shall maintain records of each day that the portable Crude I Generator is operated.

The permittee shall record the date and duration of any period during which the 3-hour average ammonia injection rate, determined hourly, is not within the acceptable range established during the performance test.

# **REPORTING REQUIREMENTS**

In accordance with Condition 3 of Part III, the permittee shall report the date and duration of any 3-hour average ammonia injection rate deviating from the range established during the supplier's performance test, including any corrective action taken.

The permittee shall also report the total time in days that the generator remained on site and was operating.

# PART II.A – NEW EMISSION POINTS EMISSION POINTS AS-003, AV-006, AND AZ-013

Beginning upon permit issuance, the permittee shall comply with the following requirements for Emission Points AS-003 (Blending, Plant 34 Equipment Leaks), AV-006 (Acid & Marketing Area, Plant 37 Equipment Leaks), and AZ-013 (Shipping, Plant 45 Equipment Leaks).

# **EQUIPMENT LEAK DEFINITION**

For components in ethanol service, the permittee shall use the following internal leak definitions unless specified more stringent in an applicable federal standard:

- (a) No greater than 500 ppmv VOC for each valve and pressure relief device.
- (b) No greater than 2,000 ppmv VOC for each pump and compressor.

# MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

In addition to any applicable federal requirements, the permittee shall monitor the components specified above in ethanol service in Plants 34, 37, and 45 for leaks once per quarter using an approved gas analyzer conforming to the requirements of §60.485a(a)-(b). (Those valves meeting the definition of inaccessible or unsafe-to-monitor, as defined in §60.482-7a(g), are excluded from this requirement.) Any valve or pump found to be leaking shall be tagged and repaired within 15 days after the leak is found. If the repair would require a unit shutdown, the repair may be delayed until a scheduled shutdown is identified for such repair. Repaired components shall be re-monitored within 15 days of being placed back into ethanol service.

For any equipment designated for no detectable emissions, the permittee shall conduct a compliance test in accordance with §60.485a(c).

# PART II.B – MODIFIED EMISSION POINTS EMISSION POINT AE-001

Beginning upon permit issuance, the permittee shall comply with the following requirements for Emission Point AE-001 (Crude I, Plant 11 Equipment Leaks).

# EQUIPMENT LEAK DEFINITION

For components in VOC service (as defined in §60.481a), the permittee shall use the following internal leak definitions for components in light liquid or gas/vapor service (as defined in §60.485a(e)), unless specified more stringent in an applicable federal standard:

- (a) No greater than 500 ppmv VOC for each valve and pressure relief device.
- (b) No greater than 2,000 ppmv VOC for each pump and compressor.

# MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

In addition to any applicable federal requirements, the permittee shall monitor the components specified above in light liquid or gas/vapor service in Plant 11 for leaks once per quarter using an approved gas analyzer conforming to the requirements of §60.485a(a)-(b). (Those valves meeting the definition of inaccessible or unsafe-to-monitor, as defined in §60.482-7a(g), are excluded from this requirement.) Any valve or pump found to be leaking shall be tagged and repaired within 15 days after the leak is found. If the repair would require a unit shutdown, the repair may be delayed until a scheduled shutdown is identified for such repair. Repaired components shall be remonitored within 15 days of being placed back into VOC service.

For any equipment designated for no detectable emissions, the permittee shall conduct a compliance test in accordance with §60.485a(c).

# PART II.B – MODIFIED EMISSION POINTS EMISSION POINT AU-361

Beginning [Modification Date], the permittee shall comply with the following emission limitations and monitoring requirements below for Emission Point AU-361 (formerly AB-370), the No. 2 Cooling Tower (Ref.: E-36101), located in the Cooling Water Plant (Plant 36).

# **EMISSION LIMIT**

Volatile Organic Compounds

0.7 lb/MM gal of circulated water (12month rolling average), not to exceed 10.12 tons/year (12-month rolling total)

# MONITORING REQUIREMENTS

The permittee shall perform monthly monitoring of the VOC content at each header to the cooling tower with an air stripping method meeting the requirements of the Texas Commission on Environmental Quality (TCEQ) Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or an approved equivalent sampling method.

Within 180 days after startup of the modified unit, the permittee shall implement and submit to DEQ a written plan for establishing the VOC concentration that indicates a leak, which shall be no greater than 84 ppbw, and for determining the location of the source(s) of the leak. The plan shall also specify a schedule for repairing the leak(s) at the earliest opportunity, but no later than the next scheduled shutdown of the process unit(s) in which the leak(s) occurs.

The permittee shall continuously monitor the total inlet water flow rate to the cooling tower in gallons per minute.

# **RECORDKEEPING REQUIREMENTS**

The permittee shall record the monthly VOC concentration and the total monthly cooling water flow, as well as the monthly VOC emission rate in lb/MM gal of circulated water and tons/year. The 12-month rolling total VOC emission rate for each month shall be calculated by summing the VOC concentration measured for each month of the 12-month period multiplied by the total cooling water flow for that month.

# **REPORTING REQUIREMENTS**

In accordance with Condition 3 of Part III, the permittee shall report the 12-month rolling VOC emission rate in lb/MM gal of circulated water and tons/year for each month of the semiannual reporting period.

#### PART II.B – MODIFIED EMISSION POINTS EMISSION POINTS AV-054, AV-080, AND AS-175

Beginning upon permit issuance, the permittee is authorized to modify the following storage tanks and to change the service of the storage tanks as specified below.

Emission Point	Chevron ID	Tank Description	Existing Service	Service upon certification of construction with the PMT
				Ethanol Blending Project
AV-054	T-54	247,842-gallon, external	Mid-grade gasoline	Regular gasoline
		floating roof tank		
AV-080	T-80	659,400-gallon, internal	Mid-grade gasoline	Ethanol
		floating roof tank		
AS-175	T-175	1,498,098-gallon, internal	Methanol	Ethanol
		floating roof tank		

# NSPS Subpart Kb – Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

For Emission Points AV-080 and AS-175, the permittee is subject to and shall comply with the *New Source Performance Standards for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984* (40 CFR Part 60, Subpart Kb) and the applicable *General Provisions* (40 CFR Part 60, Subpart A). The permittee shall equip each tank with a fixed roof in combination with an internal floating roof, meeting the specifications in §60.112b(a)(1)(i) through (ix).

# PART II.B – MODIFIED EMISSION POINTS EMISSION POINT CG-002

Beginning upon permit issuance, the permittee is authorized to modify air emissions equipment and emit air contaminants from Emission Point CG-002 (formerly AN-000-VRU and AN-000-RACK), the Pascagoula Marketing Terminal (Plant 5171) currently consisting of three loading racks, additive injection systems, and two Vapor Recovery Units (VRU's) for the control of gasoline loading emissions. This permit allows for construction of two separate projects at the Pascagoula Marketing Terminal (PMT). One is construction of an additional fuel additive system. The other includes piping modifications to enable ethanol and mid-grade gasoline blending "as-loaded" as well as other improvements, referred to as the PMT Ethanol Blending Project.

The air emissions equipment shall be constructed to comply with the emission limitations and monitoring requirements specified below.

# FUEL THROUGHPUT LIMIT

Upon certification of construction with Ethanol Blending Project, the permittee shall limit the annual throughput of fuel at the marketing terminal, based on a rolling 365-day period, to the following:

Gasoline (including aviation gasoline):	350,000,000 gallons/year
Diesel:	250,000,000 gallons/year
Jet fuel:	30,000,000 gallons/year

#### MACT SUBPART R – NESHAP for Gasoline Distribution Facilities

Emissions to the atmosphere from the vapor collection and processing systems due to the loading of gasoline cargo tanks shall not exceed 10 milligrams of total organic compounds per liter of gasoline loaded. (Ref.: §63.422(b)).

#### **MONITORING REQUIREMENTS**

The permittee shall install, calibrate, certify, operate, and maintain a continuous emission monitoring system (CEMS) capable of measuring organic compound concentration in the exhaust air stream. (Ref.: §63.427(a)(1)) The continuous monitoring system shall meet the performance specifications required by the applicable standards in 40 CFR Part 63, Subpart A – *General Provisions*, as specified in Table 1 to Subpart R.

# **RECORDKEEPING REQUIREMENTS**

The following records shall be maintained in accordance with Condition 1 of Part III. The following recordkeeping requirements may not encompass all of the recordkeeping required by the federal regulations.

- (a) The permittee shall record the daily amount of gasoline, diesel, and jet fuel loaded at the marketing terminal in gallons per day and shall calculate the total amount of each fuel loaded in gallons per year for each consecutive 365-day period.
- (b) The permittee shall maintain up-to-date records of the vapor tightness documentation described in §63.428(b) for each gasoline cargo tank which is to be loaded at the affected facility. These records shall be kept on file at the terminal in a permanent form available for inspection. For facilities that utilize a terminal automation system to prevent gasoline cargo tanks that do not have valid cargo tank tightness documentation from loading, a copy of the documentation shall be made available for the permitting authority representative during the course of a site visit or within a mutually agreeable time frame. (Ref.: §63.422(c), §63.428(b) and (k)(2), §60.502(e), §60.505(a), (b), and (e)(2))
- (c) The permittee shall record the tank identification number of each gasoline tank truck as it is loaded at the facility. The permittee shall cross-check each tank identification number obtained in §60.502(e)(2), as summarized above, with the file of tank vapor tightness documentation required in §60.505(a) within two (2) weeks after the corresponding tank is loaded, except as specified in §60.502(e)(3)(i)(A) or (B). Alternate procedures for limiting gasoline tank truck loading may be used upon application to, and approval by, the Administrator. (Ref.: §63.422(a) and (c), §60.502(e)(2), (3), and (6))
- (d) The permittee shall keep an up-to-date, readily accessible record of the continuous monitoring data required under §63.427(a). This record shall indicate the time intervals during which loadings of gasoline cargo tanks have occurred or, alternatively, shall record the operating parameter data only during such loadings. The date and time of day shall also be indicated at reasonable intervals on this record. (Ref.: §63.428(c)(1))
- (e) The permittee shall record the information in §63.428(e)(1)-(7) in the log book for each leak that is detected. (Ref.: §63.428(e) and §60.505(c))

# **REPORTING REQUIREMENTS**

In accordance with Condition 3 of Part III, the permittee shall submit semiannual reports including, but not limited to, the following information:

- (a) The total amount of each fuel loaded for each consecutive 365-day period during the semiannual period.
- (b) Each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility. (Ref.: §63.428(g)(1))
- (c) The number of equipment leaks not repaired within 5 days after detection. (Ref.: §63.428(g)(3))
- (d) An excess emissions report of each exceedance of the total organic compounds standard for loading racks in accordance with §63.10(e)(3), each instance a non vapor-tight gasoline cargo tank reloaded at the facility before vapor tightness documentation for that cargo tank was obtained, and each occurrence of an equipment leak for which no repair attempt was made within 5 days or for which repair was not completed within 15 days after detection.. (Ref.: §63.428(h)(1)-(4))

# PART II.B – MODIFIED EMISSION POINTS EMISSION POINT CG-003

Beginning upon permit issuance, the permittee shall comply with the following requirements for Emission Point CG-003 (PMT, Plant 5171 Equipment Leaks).

# **EQUIPMENT LEAK DEFINITION**

For components in VOC service (as defined in §60.481a), the permittee shall use the following internal leak definitions for components in light liquid or gas/vapor service (as defined in §60.485a(e)), unless specified more stringent in an applicable federal standard:

- (a) No greater than 500 ppmv VOC for each valve and pressure relief device.
- (b) No greater than 2,000 ppmv VOC for each pump and compressor.

# MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

In addition to any applicable federal requirements, the permittee shall monitor the components specified above in light liquid or gas/vapor service in Plant 5171 for leaks once per quarter using an approved gas analyzer conforming to the requirements of §60.485a(a)-(b). (Those valves meeting the definition of inaccessible or unsafe-to-monitor, as defined in §60.482-7a(g), are excluded from this requirement.) Any valve or pump found to be leaking shall be tagged and repaired within 15 days after the leak is found. If the repair would require a unit shutdown, the repair may be delayed until a scheduled shutdown is identified for such repair. Repaired components shall be remonitored within 15 days of being placed back into VOC service.

For any equipment designated for no detectable emissions, the permittee shall conduct a compliance test in accordance with §60.485a(c).

# PART II.B – MODIFIED EMISSION POINTS EMISSION POINT BB-002

Beginning upon permit issuance, the permittee shall comply with the following requirements for Emission Point BB-002 (Paraxylene Complex, Plant 53 CMPU Equipment Leaks).

# VALVE AND PUMP REQUIREMENTS

In conjunction with the Paraxylene Adsorber Improvements Project within Plant 53, the permittee shall install bellows-seal valves on all new valves installed of two (2) inches or less in diameter that are in vapor or light liquid service.

# PART II.C – AFFECTED EMISSION POINTS REFINERY FUEL GAS-BURNING EMISSION UNITS

The following refinery fuel gas-burning emission units, including process heaters, furnaces, and boilers, are affected emission units that are not undergoing any physical or operational changes. They are included in this permit as a result of decreasing permit limits due to reduced sulfur in the refinery fuel gas and/or reduced firing rates.

**SO<sub>2</sub> Averaging Time:** All lb/hr limits are 24-hr rolling averages determined hourly, and all tons/year limits are 12-month rolling totals, determined monthly.

**Opacity:** Unless otherwise specified, the opacity of each of the following emission points shall not exceed 40%.

**Fuel Restriction:** With the exception of Emission Points AE-012 and BE-211, the permittee shall not burn fuels other than refinery fuel gas and natural gas in any of the following emission points. Emission Point AE-012 may burn vacuum column overhead gas, in addition to refinery fuel gas and natural gas, until the furnace becomes NSPS J compliant, at which time it may only burn refinery fuel gas and natural gas. Emission Point BE-211 also burns Merox Regenerator gas, in addition to refinery fuel gas and natural gas.

**Total Sulfur Monitoring:** The permittee shall collect weekly fuel samples in an as-fired condition and analyze for total sulfur content in addition to the requirements of NSPS Subpart J or NSPS Subpart Ja. For each emission unit, the permittee shall also monitor the amount of fuel combusted each hour.

**NSPS Subpart J:** With the exception of Emission Point AE-012, the following emission points are subject to Part III, Condition 4. By March 31, 2008, Emission Point AE-012 shall be subject to NSPS Subpart J, per Part III, Condition 4.

**NSPS Subpart Db:** Upon certification of construction with the Boiler Replacement PSD Permit, Emission Points AL-104, AL-105, and AL-106 are subject to Part III, Condition 5.

\* Note that the following table only contains the applicable emission limits upon certification of construction with the relevant project. This permit does not replace or relax any monitoring, recordkeeping, or reporting required by previous permits for these emission units, nor do these changes trigger the reconstruction or modification provisions of 40 CFR Part 60.

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Emission Point	Former Emission Point	Refinery ID	Description	Pollutant	Emission Limits	Effective Date
			Crude I (F	Plant 11)		
			Two common stacks for the	PM/PM <sub>10</sub>	6.83 lb/hr, 19.96 ton/yr	
			Vacuum Column Furnace with a	SO <sub>2</sub>	42.78 lb/hr, 119.3 ton/yr	Upon permit issuance
AE-013	AA-011 &	F-1102 &	rated capacity of 231 MMBtu/hr	NO <sub>x</sub>	89.94 lb/hr, 262.62 ton/yr	
	AA-012	F-1101	and the Atmospheric Column Furnace with a rated capacity of 380.6 MMBtu/hr	СО	165.56 lb/hr, 193.38 ton/yr	
				PM/PM <sub>10</sub>	6.83 lb/hr, 19.96 ton/yr	Upon certification of
			Two common stacks for the	SO <sub>2</sub>	37.59 lb/hr, 94.88 ton/yr	construction with the
			Vacuum Column Furnace with a	NO <sub>x</sub>	89.94 lb/hr, 262.62 ton/yr	Crude I F-1102 NSR
AE-013	AA-011 & AA-012	F-1102 & F-1101	rated capacity of 231 MMBtu/hr and the Atmospheric Column Furnace with a rated capacity of 380.6 MMBtu/hr	со	165.56 lb/hr, 193.38 ton/yr	Project but before certification of construction with the Coker Improvement Projects
			Two common stacks for the	PM/PM <sub>10</sub>	6.83 lb/hr, 19.96 ton/yr	
	AA-011 & 1 AA-012		Vacuum Column Furnace with a rated capacity of 231 MMBtu/hr	$SO_2$	37.59 lb/hr, 85.62 ton/yr	Upon certification of construction with the
AE-013		F-1102 &		NO <sub>x</sub>	89.94 lb/hr, 262.62 ton/yr	
ALLOID		AA-012 F-1101	and the Atmospheric Column Furnace with a rated capacity of 380.6 MMBtu/hr	СО	165.56 lb/hr, 193.38 ton/yr	Coker Improvement Projects
			ISOMAX I (Pla	nts 12 and 13)		
AF-021	AA-021	F-1201, F-1301, & F-1302	Common stack for three process heaters with rated capacities of 90, 17.5, and 17.5 MMBtu/hr, respectively	SO <sub>2</sub>	7.69 lb/hr, 17.50 ton/yr	Upon certification of construction with the Coker Improvement Projects
AF-024	AA-024	F-1304	Process heater with a rated capacity of 100 MMBtu/hr	SO <sub>2</sub>	6.15 lb/hr, 14.00 ton/yr	Upon certification of
AF-025	AA-025	F-1305	Process heater with a rated capacity of 140 MMBtu/hr	SO <sub>2</sub>	8.61 lb/hr, 19.60 ton/yr	construction with the Coker Improvement
AF-026	AA-026	F-1306	Process heater with a rated capacity of 40 MMBtu/hr	SO <sub>2</sub>	2.46 lb/hr, 5.60 ton/yr	Projects

# PROCESS HEATERS, FURNACES, AND BOILERS BURNING REFINERY FUEL GAS

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Emission Point	Former Emission Point	Refinery ID	Description	Pollutant	Emission Limits	Effective Date	
_	Rheniformer I/Naphtha Hydrotreater (NHT) I (Plants 15 and 115)						
AG-041	AA-041	F-1531	NHT I Feed pre-heater with a rated capacity of 65 MMBtu/hr	SO <sub>2</sub>	4.00lb/hr, 10.08 ton/yr	Upon Permit Issuance	
AG-041	AA-041	F-1531	NHT I Feed pre-heater with a rated capacity of 65 MMBtu/hr	SO <sub>2</sub>	4.00lb/hr, 9.10 ton/yr	Upon certification of construction with the	
AG-042	AA-042	F-1532	NHT I Desulfurizer reboiler with a rated capacity of 42 MMBtu/hr	SO <sub>2</sub>	2.58 lb/hr, 5.88 ton/yr	Coker Improvement Projects	
		E 1501	Common stack for three Rhen I	PM/PM <sub>10</sub>	5.45 lb/hr, 21.6 ton/yr	Upon certification of	
AG 043	A A 043	F-1501, F-1502 &	process furnaces with a total	SO <sub>2</sub>	33.50 lb/hr, 76.29 ton/yr	construction with the	
AU-043	AA-043	$F_{-1502}, \&$	combined heat input of 545	NO <sub>x</sub>	136.0 lb/hr, 539.7 ton/yr	Coker Improvement	
		1-1505	MMBtu/hr	CO	118.0 lb/hr, 169.0 ton/yr	Projects	
			Fluidized Catalytic Crackin	ng (FCC) Unit (I	Plant 16)		
AH-052 AA	AA-052 F-1601		FCC feed furnace with a rated	PM/PM <sub>10</sub>	1.84 lb/hr (3-hr block avg.), 5.38 ton/yr (12-month rolling total)		
				SO <sub>2</sub>	10.14 lb/hr (24-hr rolling avg.), 23.10 ton/yr (12-month rolling total)	Upon certification of	
		equipped with ultra low-NO <sub>x</sub> burners	NO <sub>x</sub>	9.16 lb/hr (3-hr rolling average), 25.00 ton/yr (12- month rolling total)	Construction with the Coker Improvement Projects		
			СО	44.67 lb/hr (3-hr rolling average), 48.60 ton/yr (12- month rolling total)			
				Opacity	20%		
			Boiler Plant	(Plant 21)			
AL-101, AL-102, & AL-103	AA-101, AA-102, & AA-103	F-2101, F-2102, & F-2103	Three boilers with a rated capacity of 257 MMBtu/hr each. Emission limits apply to each boiler.	SO <sub>2</sub>	15.80 lb/hr, 36.02 ton/yr	Upon certification of construction with the Coker Improvement Projects	

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Emission Point	Former Emission Point	Refinery ID	Description	Pollutant	Emission Limits	Effective Date
AL-104, AL-105, & AL- 106			Three boilers with a rated capacity of 265 MMBtu/hr each and equipped with ultra low-NO <sub>x</sub> burners. Emission limits apply to each boiler.	PM/PM <sub>10</sub>	0.0075 lb/MMBtu (3-hr block avg.), not to exceed 2.96 lb/hr (3-hr block avg.) and 8.65 ton/yr (12-month rolling total)	Upon certification of construction with the Boiler Replacement Project PSD Permit and the Coker Improvement Projects
				SO <sub>2</sub>	16.29 lb/hr (24-hr rolling avg.), 37.14 ton/yr (12-month rolling total)	
	NA	F-2101, F-2102, & F-2103		NO <sub>x</sub>	0.040 lb/MMBtu (365-day rolling avg.), not to exceed 15.90 lb/hr (3-hr rolling avg.) and 46.43 ton/yr (12-month rolling total)	
				со	100 ppmvd @ 3% O <sub>2</sub> (3-hr rolling avg.), not to exceed 28.69 lb/hr (3-hr rolling avg.) and 83.79 ton/yr (12-month rolling total)	
	I		Hydrofiner	(Plant 22)		
AM-111	AA-111	F-2201	Process heater with a rated capacity of 48 MMBtu/hr	PM/PM <sub>10</sub> SO <sub>2</sub>	0.436 lb/hr, 1.27 ton/yr 2.95 lb/hr, 6.72 ton/yr	Upon certification of construction with the Coker Improvement Projects
	F		Aromax Unit	(Plant 24)		
AN-752	AA-752	F-2410	Naphtha hydrotreater furnace with a rated capacity of 39.2 MMBtu/hr	PM/PM10           SO2           NOx           CO           VOC	0.30 lb/hr, 1.30 ton/yr 2.41 lb/hr, 5.49 ton/yr 4.08 lb/hr, 12.00 ton/yr 5.76 lb/hr, 4.87 ton/yr 0.22 lb/hr, 0.94 ton/yr	Upon certification of construction with the Coker Improvement Projects
AN-753	AA-753	F-2440, F-2450, F-2460, F-2470, F-2480, & F-2490	Common stack for six furnaces with a total rated capacity of 550 MMBtu/hr equipped with Low-NO <sub>x</sub> burners	$\frac{PM/PM_{10}}{SO_2}$ $\frac{NO_x}{CO}$ $VOC$	4.18       lb/hr, 18.30       ton/yr         33.80       lb/hr, 76.99       ton/yr         40.2       lb/hr, 153.5       ton/yr         81.00       lb/hr, 62.02       ton/yr         3.03       lb/hr, 13.20       ton/yr	Upon certification of construction with the Coker Improvement Projects

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Emission Point	Former Emission Point	Refinery ID	Description	Pollutant	Emission Limits	Effective Date
	۶					
				PM/PM <sub>10</sub>	4.02 lb/hr (3-hr rolling average), 14.10 ton/yr	
			Common stock for two rorun	SO <sub>2</sub>	9.88 lb/hr, 24.94 ton/yr	
BB-163 AA-161 & AA-162	AA-161 & AA-162	F-5327A & F- 5327B	column reboiler furnaces with a rated capacity of 80.4 MMBtu/hr each and equipped with ultra low- $NO_x$ burners	NO <sub>x</sub>	0.037 lb/MMBtu heat input (365-day rolling average), not to exceed 8.92 lb/hr (3-hr rolling average) and 26.06 ton/yr	IBtu heat input ling average), not 22 lb/hr (3-hr ge) and 26.06 -hr rolling 2 ton/yr
				СО	9.65 lb/hr (3-hr rolling average), 28.2 ton/yr	
				PM/PM <sub>10</sub>	4.02 lb/hr (3-hr rolling average), 14.10 ton/yr	Upon certification of construction with the Coker Improvement Projects
			Common stack for two rerun	SO <sub>2</sub>	9.88 lb/hr, 22.54 ton/yr	
BB-163 A	AA-161 & AA-162	F-5327A & F- 5327B	column reboiler furnaces with a rated capacity of 80.4 MMBtu/hr each and equipped with ultra low- NO <sub>x</sub> burners	reboiler furnaces with a pacity of 80.4 MMBtu/hr d equipped with ultra low- mers NO <sub>x</sub> 0.037 lb/MMBtu heat input (365-day rolling total), not to exceed 8.92 lb/hr (3-hr rolling average) and 26.06 ton/yr Upon certain the construction of the constr	Construction with the Coker Improvement Projects	
				СО	9.65 lb/hr (3-hr rolling average), 28.2 ton/yr	Upon Permit Issuance Upon certification of construction with the Coker Improvement Projects Upon certification of construction with the Coker Improvement Projects
BB-165 AA-165				PM/PM <sub>10</sub>	3.40 lb/hr (3-hr rolling average), 14.89 ton/yr	
				SO <sub>2</sub>	10.45 lb/hr, 23.80 ton/yr	
	AA-165	F-5327C	Rerun column reboiler furnace with a rated capacity of 170 MMBtu/hr and equipped with ultra low-NO <sub>x</sub> burners	NO <sub>x</sub>	0.037 lb/MMBtu heat input (365-day rolling average), not to exceed 9.44 lb/hr (3-hr rolling average) and 27.55 ton/yr	Upon Permit Issuance Upon certification of construction with the Coker Improvement Projects Upon certification of construction with the Coker Improvement Projects
				СО	10.2 lb/hr (3-hr rolling average), 29.78 ton/yr	

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Emission Point	Former Emission Point	Refinery ID	Description	Pollutant	Emission Limits	Effective Date
				PM/PM <sub>10</sub>	5.24 lb/hr (3-hr rolling average), 18.35 ton/yr	
				$SO_2$	12.90 lb/hr, 29.36 ton/yr	
BB-174 AA-174	AA-174	F-5337C	Raffinate column reboiler furnace with a rated capacity of 209.7 MMBtu/hr and equipped with ultra low-NO <sub>x</sub> burners	NO <sub>x</sub>	0.037 lb/MMBtu heat input (365-day rolling average), not to exceed 11.64 lb/hr (3-hr rolling average) and 33.99 ton/vr	Effective Date         Upon certification of construction with the Coker Improvement Projects         Upon certification of construction with the Coker Improvement Projects         Upon certification of construction with the Coker Improvement Projects         Upon certification of construction with the Coker Improvement Projects         Upon certification of construction with the Coker Improvement Projects
				СО	12.58 lb/hr (3-hr rolling average), 36.75 ton/yr	
				PM/PM <sub>10</sub>	2.43 lb/hr (3-hr rolling average), 8.5 ton/yr	Effective Date         Upon certification of construction with the Coker Improvement Projects         Upon certification of construction with the Coker Improvement Projects         Upon certification of construction with the Coker Improvement Projects         Upon certification of construction with the Projects         Upon certification of construction with the Projects
			Paffinata column roboilar furnaça	$SO_2$	5.97 lb/hr, 13.61 ton/yr	
BB-191	AA-191	F-5337A	Raffinate column reboiler furnace with a rated capacity of 97.2 MMBtu/hr and equipped with ultra low-NO <sub>x</sub> burners	NO <sub>x</sub>	0.037 lb/MMBtu heat input (365-day rolling average), not to exceed 5.39 lb/hr and 15.72 ton/yr	
				СО	5.83 lb/hr (3-hr rolling average), 17.04 ton/yr	
BB-192 AA-192		A-192 F-5337B Raffinate column reboiler furnace With a rated capacity of 90.8 MMBtu/hr and equipped with ultra low-NO <sub>x</sub> burners	Deffinete column reheiler furness	PM/PM <sub>10</sub>	2.27 lb/hr (3-hr rolling average), 7.97 ton/yr	
				$SO_2$	5.58 lb/hr, 12.71 ton/yr	Upon certification of
	AA-192		NO <sub>x</sub>	0.037 lb/MMBtu heat input (365-day rolling average), not to exceed 5.04 lb/hr and 14.72 ton/yr	construction with the Coker Improvement Projects	
				СО	5.45 lb/hr (3-hr rolling average), 15.9 ton/yr	Upon certification of construction with the Coker Improvement Projects Upon certification of construction with the Coker Improvement Projects Upon certification of construction with the Coker Improvement Projects

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Emission Point	Former Emission Point	Refinery ID	Description	Pollutant	Emission Limits	Effective Date
				PM/PM <sub>10</sub>	0.68 lb/hr (3-hr rolling average), 2.37 ton/yr	
			Isomerization reactor feed furnace	SO <sub>2</sub>	2.43 lb/hr, 5.53 ton/yr	oppose of the second se
BB-193	AA-193	F-5380A	with a rated capacity of 39.5 MMBtu/hr	NO <sub>x</sub>	8.30 lb/hr (3-hr rolling average), 24.22 ton/yr	Coker Improvement
				СО	2.07 lb/hr (3-hr rolling average), 6.04 ton/yr	
				PM/PM <sub>10</sub>	0.68 lb/hr(3-hr rolling average), 2.37 ton/yr	Upon certification of construction with the Coker Improvement Projects
BB-194 AA			Isomerization reactor feed furnace	SO <sub>2</sub>	2.43 lb/hr, 5.53 ton/yr	
	AA-194	F-5380B	with a rated capacity of 39.5 MMBtu/hr	NO <sub>x</sub>	8.30 lb/hr (3-hr rolling average), 24.22 ton/yr	
	MMBtu/hr averag CO 2.07 lb averag	2.07 lb/hr (3-hr rolling average), 6.04 ton/yr	riojecis			
			Isomerization reactor drier	PM/PM <sub>10</sub>	0.33 lb/hr (3-hr rolling average), 1.14 ton/yr	- Upon certification of
				SO <sub>2</sub>	1.19 lb/hr, 2.70 ton/yr	
BB-195 A	AA-195	F-5387	regenerator with a rated capacity of 19.3 MMBtu/hr	NO <sub>x</sub>	4.05 lb/hr (3-hr rolling average), 11.83 ton/yr	Coker Improvement Projects
				СО	1.01 lb/hr (3-hr rolling average), 2.93 ton/yr	
	-		Crude II Uni	t (Plant 61)		
			Common stack for two process	PM/PM <sub>10</sub>	5.87 lb/hr, 17.13 ton/yr	Upon certification of
BE-211	AA-211 &	F-6101 &	heaters with rated capacities of 325	SO <sub>2</sub>	33.54 lb/hr, 73.49 ton/yr	construction with the
DL 211	AA-212	F-6102	MMBtu/hr and 200 MMBtu/hr,	NO <sub>x</sub>	315.00 lb/hr, 919.80 ton/yr	Coker Improvement
			respectively	CO	142.12 lb/hr, 166.00 ton/yr	Projects

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Emission Point	Former Emission Point	Refinery ID	Description	Pollutant	Emission Limits	Effective Date
Isocracker II (Isomax) (Plant 62)						
BF-221	AA-221	F-6210	1 <sup>st</sup> stage feed furnace with a rated capacity of 55 MMBtu/hr	SO <sub>2</sub>	3.38 lb/hr, 7.70 ton/yr	Upon certification of construction with the Coker Improvement Projects
BF-222	AA-222	F-6230	2 <sup>nd</sup> stage feed furnace with a rated capacity of 55 MMBtu/hr	SO <sub>2</sub>	3.38 lb/hr, 7.70 ton/yr	Upon certification of construction with the Coker Improvement Projects
			Topping column process heater with	PM/PM <sub>10</sub>	2.98 lb/hr, 8.71 ton/yr	
				SO <sub>2</sub>	16.30 lb/hr, 37.10 ton/yr	Upon certification of construction with the Coker Improvement Projects
BF-223 AA			a rated capacity of 265 MMBtu/hr	NO <sub>x</sub>	7.95 lb/hr, 23.21 ton/yr	
	AA-223	F-6250	and equipped with an ultra low-NO	CO	71.75 lb/hr, 78.12 ton/yr	
		bi	burner	Opacity	20%, except for one 6-minute period per hour of not more than 27%	
BF-224	AA-224	F-6260	Isosplitter process heater with a rated capacity of 110 MMBtu/hr	SO <sub>2</sub>	6.77 lb/hr, 15.40 ton/yr	Upon certification of construction with the Coker Improvement Projects
			Hydrogen II	(Plant 64)		
				PM/PM <sub>10</sub>	1.94 lb/hr, 8.49 ton/yr	Unan contification of
			Three stacks for one process heater	SO <sub>2</sub>	44.90 lb/hr, 102.19 ton/yr	construction with the
BH-231	AA-231	F-6410	with a rated capacity of 730	NO <sub>x</sub>	422.8 lb/hr, 1852 ton/yr	Coker Improvement
			MMBtu/hr	CO	25.84 lb/hr, 113.18 ton/yr	Projects
				VOC	0.90 lb/hr, 3.96 ton/yr	110,0000
			Rheniformer II/Naphtha Hydr	otreater (NHT)	II (Plant 65)	
BI-241	AA-241	F-6550, F-6560, F-6570, & F-6580	Two common stacks for four process heaters with a rated capacity of 121, 129, 118, and 49 MMBtu/hr, respectively	$SO_2$	25.65 lb/hr, 58.45 ton/yr	Upon certification of construction with the Coker Improvement Projects

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Emission Point	Former Emission Point	Refinery ID	Description	Pollutant	Emission Limits	Effective Date
				PM/PM <sub>10</sub>	0.50 lb/hr, 1.47 ton/yr	
				SO <sub>2</sub>	2.77 lb/hr, 6.30 ton/yr	Upon certification of construction with the Coker Improvement Projects         Upon certification of construction with the
BI-245	AA-245	F-6531	HDS II process neater with a rated	NO <sub>x</sub>	6.62 lb/hr, 19.32 ton/yr	Color Improvement
			capacity of 45 wivibtu/iii	CO	12.18 lb/hr, 14.23 ton/yr	Projects
				VOC	0.36 lb/hr, 1.06 ton/yr	Tiojeets
BI-246	AA-246	F-6532	HDS II desulfurizer reboiler with a rated capacity 37 MMBtu/hr	SO <sub>2</sub>	2.28 lb/hr, 5.18 ton/yr	Upon certification of construction with the Coker Improvement Projects
			Fluidized Catalytic Cracking (	FCC) Hydrofine	er (Plant 67)	· · · · ·
BK-261	AA-261	F-6701	Hydrofiner feed furnace with a rated capacity of 70 MMBtu/hr and equipped with an ultra low-NO <sub>x</sub> burner	$SO_2$	4.31 lb/hr, 9.80 ton/yr	Upon certification of construction with the Coker Improvement Projects
			Rheniformer I	II (Plant 69)		
BM-271	AA-271	F-6950, F-6960, F-6970, & F-6980	Two common stacks for four process heaters with a rated capacity of 128.1, 99.5, 59.6, and 40.8 MMBtu/hr, respectively	SO <sub>2</sub>	20.17 lb/hr, 45.97 ton/yr	Upon certification of construction with the Coker Improvement Projects
	F	4	Residuum Desulfurization	(RDS) Unit (Pl	ant 81)	
		A-511 F-8110		РМ	0.005 lb/MMBtu heat input	Upon certification of
<b>PD 511</b>	A A 511		Feed furnace No. 1 with a rated capacity of 65 MMBtu/hr	SO <sub>2</sub>	4.00 lb/hr, 9.10 ton/yr	construction with the
<b>DI -</b> J11	AA-311			NO <sub>x</sub>	125 ppmvd @ 3% O <sub>2</sub>	Coker Improvement Projects
				PM	0.005 lb/MMBtu heat input	Upon certification of
BP-512	A A-512	F-8120	Feed furnace No. 3 with a rated	$SO_2$	4.00 lb/hr, 9.10 ton/yr	construction with the
DI-312 AA-31	111 512	1 0120	capacity of 65 MMBtu/hr	NO <sub>x</sub>	125 ppmvd @ 3% O <sub>2</sub>	Coker Improvement Projects
				PM	0.005 lb/MMBtu heat input	Upon certification of
BP-513	AA-513	F-8130	Feed furnace No. 3 with a rated	SO <sub>2</sub>	4.00 lb/hr, 9.10 ton/yr	construction with the
BE-212			capacity of 65 MMBtu/hr	NO <sub>x</sub>	125 ppmvd @ 3% O <sub>2</sub>	Projects Upon certification of construction with the Coker Improvement Projects Upon certification of construction with the Coker Improvement Projects

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Emission Point	Former Emission Point	Refinery ID	Description	Pollutant	Emission Limits	Effective Date	
Coker (Plant 83)							
				PM/PM <sub>10</sub>	2.27 lb/hr, 6.64 ton/yr		
				SO <sub>2</sub>	12.51 lb/hr, 28.49 ton/yr	Upon certification of	
BQ-521	AA-521	F-8300A	consists of 202 5 MMPtu/br	NO <sub>x</sub>	29.93 lb/hr, 87.40 ton/yr	Colser Improvement	
			capacity of 205.5 WiWiBtu/III	СО	55.10 lb/hr, 64.36 ton/yr	Projects	
				VOC	1.65 lb/hr, 4.81 ton/yr	110jeets	
				PM/PM <sub>10</sub>	2.27 lb/hr, 6.64 ton/yr		
			Calcon furnesses No. 2 with a noted	SO <sub>2</sub>	12.51 lb/hr, 28.49 ton/yr	Upon certification of	
BQ-522	AA-522	F-8300B	consists of 203 5 MMBtu/hr	NO <sub>x</sub>	29.93 lb/hr, 87.40 ton/yr	Construction with the Coker Improvement Projects	
			capacity of 205.5 MiMBlu/II	СО	55.10 lb/hr, 64.36 ton/yr		
				VOC	1.65 lb/hr, 4.81 ton/yr		
			Calum formana Na. 2 midt a mtad	PM/PM <sub>10</sub>	2.27 lb/hr, 6.64 ton/yr	Upon certification of	
				$SO_2$	12.51 lb/hr, 28.49 ton/yr		
BQ-523	AA-523	F-8300C	consists of 203 5 MMRtu/hr	NO <sub>x</sub>	29.93 lb/hr, 87.40 ton/yr	Construction with the	
			capacity of 205.5 MMBtu/II	СО	55.10 lb/hr, 64.36 ton/yr	Projects	
				VOC	1.65 lb/hr, 4.81 ton/yr		
			Vacuum Distillation U	nit (VDU) (Plan	t 84)		
				PM/PM <sub>10</sub>	3.07 lb/hr, 8.97 ton/yr	Upon certification of construction with the Coker Improvement Projects	
			Vacuum distillation feed furnace with a rated capacity of 275 MMBtu/hr	$SO_2$	16.90 lb/hr, 38.50 ton/yr		
BR-531	AA-531	F-8400		NO <sub>x</sub>	40.44 lb/hr, 118.09 ton/yr		
				CO	74.44 lb/hr, 86.95 ton/yr		
				VOC	2.22 lb/hr, 6.49 ton/yr		
			Coker Hydrodenitrification	(CHDN) Unit (	Plant 85)		
				PM/PM <sub>10</sub>	0.61 lb/hr, 1.79 ton/yr	Upon contification of	
			HDN sharge furnage with a roted	SO <sub>2</sub> 3.38 lb/hr, 7.70 ton/yr Upon ce	opon certification of		
BS-501	AA-501	F-8510	capacity of 55 MMBtu/br	NO <sub>x</sub>	8.09 lb/hr, 23.62 ton/yr	Coker Improvement	
			capacity of 55 wivibtu/in	CO	14.89 lb/hr, 17.39 ton/yr	Projects	
				VOC	0.44 lb/hr, 1.30 ton/yr	110,000	
			HDN distillation furnace with a	PM	0.005 lb/MMBtu heat input		
BS-502	AA-502	F-8560	rated capacity of 80 MMBtu/br	SO <sub>2</sub>	4.92 lb/hr, 12.41 ton/yr	Upon Permit Issuance	
			rated capacity of 60 wiwibid/ill	NO <sub>x</sub>	125 ppmvd @ 3% O <sub>2</sub>		

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Emission Point	Former Emission Point	Refinery ID	Description	Pollutant	Emission Limits	Effective Date
				PM	0.005 lb/MMBtu heat input	Upon certification of construction with the
BS-502	ΔΔ-502	F-8560	HDN distillation furnace with a	$SO_2$	4.92 lb/hr, 11.20 ton/yr	
<b>B3-</b> 502 <b>AA-</b> 502	1-0500	rated capacity of 80 MMBtu/hr	NO <sub>x</sub>	125 ppmvd @ 3% O <sub>2</sub>	Coker Improvement Projects	
Hydrogen III (Plant 86)						
A A 541(A)	E 8620 %	Three stacks for a 780 MMBtu/hr	PM/PM <sub>10</sub>	11.61 lb/hr, 33.91 ton/yr	Upon certification of	
BT 441	BT-441 &	I(A) F-8020 & KGT- I(B) 8650	process heater and a 270 MMBtu/hr gas turbine, which vents to the process heater	$SO_2$	49.32 lb/hr, 113.27 ton/yr	construction with the Coker Improvement Projects
D1-441				NO <sub>x</sub>	185.94 lb/hr, 542.93 ton/yr	
AA-341(b)	AA-341(B)			CO	270.26 lb/hr, 305.86 ton/yr	
			PM/PM <sub>10</sub>	0.425 lb/hr, 1.24 ton/yr	Upon certification of	
	A A 542	E 8610	Feedstock furnace with a rated	$SO_2$	2.34 lb/hr, 5.32 ton/yr	construction with the
D1-342	AA-342	1-0010	capacity of 38 MMBtu/hr	NO <sub>x</sub>	5.59 lb/hr, 16.32 ton/yr	Coker Improvement
				CO	10.29 lb/hr, 12.02 ton/yr	Projects

#### **PART III – OTHER REQUIREMENTS**

#### **Records:**

(1) The permittee shall maintain on-site records of all required monitoring data and support information required by this permit for a period of at least five (5) years from the date of the monitoring sample, measurement, report, or application. These records shall be made available for review upon request from DEQ personnel.

# **Reporting Deviations:**

(2) The permittee shall report any deviations from the permit requirements, including deviations attributable to upsets, within five (5) working days of such deviation. The report shall also include the cause of the deviation(s) and any corrective action(s) or preventive measure(s) taken. A copy of the report shall be maintained in accordance with Part III, Condition 1.

#### **Semiannual Reports:**

(3) The permittee shall submit semiannual reports of any required monitoring by September 30 for the preceding six-month period of January 1 through June 30, and by March 31 for the preceding six-month period of July 1 through December 31. All instances of deviations from permit requirements must be clearly identified in such reports and a responsible official must certify all required reports.

#### **NSPS Subpart J – Petroleum Refineries**

(4) The permittee is subject to and shall comply with the New Source Performance Standards for Petroleum Refineries (40 CFR Part 60, Subpart J) and the General Provisions (40 CFR Part 60, Subpart A). The permittee shall not burn in any fuel gas combustion device any fuel gas that contains hydrogen sulfide (H<sub>2</sub>S) in excess of 230 mg/dscm (0.10 gr/dscf), based on a 3-hour rolling average. (Ref. §60.104(a)(1))

The permittee shall install, calibrate, maintain, and operate an instrument for continuously monitoring and recording the concentration (dry basis) of H<sub>2</sub>S in fuel gases before being burned in any fuel gas combustion device. The span value for this instrument shall be 425 mg/dscm H<sub>2</sub>S. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H<sub>2</sub>S in the fuel gas being burned. The H<sub>2</sub>S continuous monitoring system shall meet the applicable monitoring requirements of §60.13. The permittee shall use Performance Specification 7 for performance evaluations for the H<sub>2</sub>S monitor required by §60.13(c). EPA Test Method 11, 15, 15A, or 16 shall be used for conducting the relative accuracy evaluations. (Ref.: §60.105(a)(4))

#### NSPS Subpart Db - Industrial-Commercial-Institutional Steam Generating Units

(5) The permittee is subject to and shall comply with the *New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units* (40 CFR Part 60, Subpart Db) and the *General Provisions* (40 CFR Part 60, Subpart A). The permittee shall not cause to be discharged into the atmosphere any gases that contain nitrogen oxides (expressed as NO<sub>2</sub>) in excess of 0.10 lb/MMBtu heat input (30-day rolling average). This standard shall apply at all times including periods of startup, shutdown, and malfunction. (Ref.: §60.44b(a), (h), and (i))

# Shutdown of Rheniformers II and III:

(6) Upon successful startup of the CCR Unit (Plant 79) and Reformate Splitter Unit (Plant 80), the permittee shall cease operating Rheniformers Units II and III and associated equipment, including the following emission points:

Emission Point	Former Emission Point	Refinery ID	Description
BC-000	NA	NA	Plant 58 – Rheniformer Feed Splitter (no specific emission points, only wastewater drains and equipment leaks)
BI-037	NA	K-6580	Regen vent for reformer reactors R-6532 and R-6538
BI-241	AA-241	F-6550, F-6560, F- 6570, and F-6580	Two common stacks for four process heaters with a rated capacity of 121, 129, 118, and 49 MMBtu/hr, respectively
BM-068	NA	K-6981	Regen vent for four reformer reactors, R-6950-80
BM-271	AA-271	F-6950, F-6960, F- 6970, and F-6980	Two common stacks for four process heaters with a rated capacity of 128.1, 99.5, 59.6, and 40.8 MMBtu/hr, respectively

Startup (i.e., shakedown) of the CCR Unit and Reformate Splitter Unit shall not exceed 180 days for each unit.

# NSPS Subpart VV – Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

- (7) The permittee is subject to and shall comply with the *New Source Performance Standards (NSPS) for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry* (40 CFR Part 60, Subpart VV), and the *General Provisions* (40 CFR Part 60, Subpart A).
  - (a) The provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry that commences construction or modification after January 5, 1981. Addition or replacement of equipment for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(b) If an owner or operator applies for one or more of the exemptions in \$60.480(d), then the owner or operator shall maintain records as required in \$60.486(i).

# NSPS Subpart XX – Bulk Gasoline Terminals

(8) Plant 5171, the Pascagoula Marketing Terminal, is subject to and shall comply with the *New Source Performance Standards (NSPS) for Bulk Gasoline Terminals* (40 CFR Part 60, Subpart XX) and the *General Provisions* (40 CFR Part 60, Subpart A). The affected facility to which the provisions of this subpart apply is the total of all the loading racks at a bulk gasoline terminal which deliver product into gasoline tank trucks.

# NSPS Subpart GGG – Equipment Leaks of VOC in Petroleum Refineries

- (9) Plant 83, the Coker Plant, is subject to and shall comply with the New Source Performance Standards (NSPS) for Equipment Leaks of VOC in Petroleum Refineries (40 CFR Part 60, Subpart GGG), and the General Provisions (40 CFR Part 60, Subpart A).
  - (a) The provisions of this subpart apply to affected facilities in petroleum refineries that commence construction or modification after January 4, 1983. Addition or replacement of equipment for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.
  - (b) Facilities subject to subpart VV or subpart KKK of 40 CFR Part 60 are excluded from this subpart.

#### **NESHAP Subpart FF – Benzene Waste Operations**

- (10) The facility is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) as described in 40 CFR Part 61, Subpart FF *National Emission Standard for Benzene Waste Operations*.
  - (a) The provisions of this subpart apply to owners and operators of chemical manufacturing plants, coke by-product recovery plants, and petroleum refineries.
  - (b) The provisions of this subpart apply to owners and operators of hazardous waste treatment, storage, and disposal facilities that treat, store, or dispose of hazardous waste generated by any facility listed in §61.340(a). The waste streams at hazardous waste treatment, storage, and disposal facilities subject to the provisions of this subpart are the benzene-containing hazardous waste from any facility listed in §61.340(a).
  - (c) At each facility identified in §61.340(a) or (b), the following waste is exempt from the requirements of this subpart:

- (1) Waste in the form of gases or vapors that is emitted from process fluids; and
- (2) Waste that is contained in a segregated storm water sewer system.
- (d) At each facility identified in §61.340(a) or (b), any gaseous stream form a waste management unit, treatment process, or wastewater treatment system routed to a fuel gas system, as defined in §61.341, is exempt from this subpart. No testing, monitoring, recordkeeping, or reporting is required under this subpart for any gaseous stream form a waste management unit, treatment process, or wastewater treatment unit routed to a fuel gas system.

#### MACT Subpart R – Gasoline Distribution Facilities

- (11) The facility is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) (40 CFR Part 63, Subpart R) and the General Provisions (40 CFR Part 63, Subpart A), as indicated in 40 CFR Part 63, Subpart R, Table 1.
  - (a) The affected source to which these provisions apply is each bulk gasoline terminal and each pipeline breakout station, except those specified in §63.420(a)(1) and (2) and §63.420(b)(1) and (2).
  - (b) Each owner or operator of a bulk gasoline terminal or pipeline breakout station subject to the provisions of this subpart that is also subject to applicable provisions of 40 CFR Part 60, Subpart  $K_b$  or XX shall comply with the provisions in each subpart that contain the most stringent control requirements for that facility.
  - (c) A bulk gasoline terminal or pipeline breakout station with a Standard Industrial Classification code 2911 locate within a contiguous area and under common control with a refinery complying with Subpart CC, §§63.646, 63.648, 63.649, and 63.650 is not subject to Subpart R standards, except as specified in Subpart CC, §63.650.

#### **MACT Subpart CC – Petroleum Refineries**

- (12) The facility is subject to and shall comply with the National Emission Standards for Hazardous Air Pollutants (NESHAP) from Petroleum Refineries (40 CFR Part 63, Subpart CC) and the General Provisions (40 CFR Part 63, Subpart A), as indicated in 40 CFR Part 63, Subpart CC, Table 6.
  - (a) This subpart applies to petroleum refining process units and to related emission points that are specified in 63.640(c)(5) through (c)(7) that are located at a plant site that meets the criteria in 63.640(a)(1) and (a)(2).

- (b) For the purpose of this subpart, the affected source shall comprise all emission points, in combination, listed in §63.640(c)(1) through (c)(7) that are located at a single refinery plant site.
- (c) The affected source subject to this subpart does not include the emission points listed in 63.640(d)(1) through (d)(5).

#### MACT Subpart EEEE – Organic Liquids Distribution (OLD)

- (13) The facility is subject to and shall comply with the *National Emission Standards for Hazardous Air Pollutants (NESHAP): Organic Liquids Distribution* (40 CFR Part 63, Subpart EEEE) and the *General Provisions* (40 CFR Part 63, Subpart A), as indicated in 40 CFR Part 63, Subpart EEEE, Table 12.
  - (a) This subpart applies to an Organic Liquid Distribution (OLD) operation that is located at, or is part of, a major source of HAP emissions. An OLD may occupy an entire plant site or be collocated with other industrial operations at the same plant site.
  - (b) The affected source is the collection of activities and equipment used to distribute organic liquids into, out of, or within a facility that is a major source of HAP and includes activities and equipment listed in §63.2238(b)(1) through (4).
  - (c) The equipment listed in §63.2238(c)(1) through (4) and used in the identified operations is excluded from the affected source. The exclusions include storage tanks, transfer racks, and equipment leak components that are part of an affected source under another 40 CFR Part 63 NESHAP.

# NSPS Subpart VVa – Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After November 7, 2006

- (14) The Adsorber System process unit in the Eluxyl Unit of the Paraxylene Plant (Plant 53E) shall be subject to and comply with the New Source Performance Standard for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After November 7, 2006 (40 CFR Part 60, Subpart VVa) and the applicable General Provisions (40 CFR Part 60, Subpart A).
  - (a) The provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry. The group of all equipment (defined in §60.481a) within a process unit is an affected facility.
  - (b) Any affected facility that commences construction, reconstruction, or modification after November 7, 2006, shall be subject to the requirements of this subpart.

- (c) Addition or replacement of equipment for the purposes of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.
- (d) Alternative means of compliance. Part 63, Subpart H. Owners or operators may choose to comply with the provisions of 40 CFR part 63, subpart H, to satisfy the requirements of §§60.482-1a through 60.487a for an affected facility. When choosing to comply with 40 CFR part 63, subpart H, the requirements of §60.485a(d), (e), and (f), and §60.486a(i) and (j) still apply.
- (e) Alternative means of compliance. Part 60, Subpart A. Owners or operators who choose to comply with the provisions of 40 CFR part 63, subpart H must also comply with §§60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for that equipment. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph do not apply to owners or operators of equipment subject to this subpart complying with 40 CFR part 63, subpart H, except that provisions required to be met prior to implementing 40 CFR part 63 still apply. Owners who comply with 40 CFR part 63, subpart H, must comply with 40 CFR part 63, subpart A.

#### NSPS Subpart GGGa – Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After November 7, 2006

- (15) The Continuous Catalyst Regeneration (CCR) Unit (Plant 79), the Reformate Splitter Unit (Plant 80), and the Pressure Swing Adsorption Unit (Plant 23) shall be subject to and comply with the New Source Performance Standard for Equipment Leaks of VOC in Petroleum Refineries for which Construction, Reconstruction, or Modification Commenced After November 7, 2006 (40 CFR Part 60, Subpart GGGa) and the applicable General Provisions (40 CFR Part 60, Subpart A).
  - (a) The provisions of this subpart apply to affected facilities in petroleum refineries. A compressor is an affected facility. The group of all the equipment (defined in §60.591a) within a process unit is an affected facility.
  - (b) Any affected facility that commences construction, reconstruction, or modification after November 7, 2006, is subject to the requirements of this subpart.
  - (c) Addition or replacement of equipment (defined in §60.591a) for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(d) Facilities subject to subpart VV, subpart VVa, subpart GGG, or subpart KKK of this part are excluded from this subpart.

# Shutdown of the Existing Effluent Treatment System

(16) Upon successful startup of the new Effluent Treatment System in Plant 32, the permittee shall cease operations of the following existing equipment in Plant 32. The permittee shall cease operation of the following equipment no later than 180 days following the commissioning of the complete new Effluent Treatment System (ETS) into service or prior to startup of the Continuous Catalyst Regeneration (CCR) Unit, whichever date comes first.

Emission Point (Former Emission Point)	Refinery ID	Description
N/A (AB-350)		Dissolved Nitrogen Flotation (DNF) #1 and #2 Vents
AQ-062 (AB-362)	T-3202	DNF Fixed Roof Tank controlled by carbon canisters
AQ-063 (AB-363)	T-3212	DNF Fixed Roof Tank controlled by carbon canisters
AQ-064	T-3213	DNF Fixed Roof Skim Oil Tank controlled by carbon canisters
N/A	N/A	Aeration Basin preceding the Activated Sludge Bioreactor (ASB) #2
AQ-067 (AB-367)	T-32161	2,100,000-Gallon, Open Roof, Bioreactor/Clarifier #1 Tank
AQ-068 (AB-368)	T-32162	2,100,000-Gallon, Open Roof, Bioreactor/Clarifier #2 Tank
N/A (AB-359)	T-90	41,700-Gallon, Fixed Roof, Skim Oil Tank

# **Projected Actual Emissions Recordkeeping for Gasoline Loading:**

(17) For Gasoline Loading Operations, including loading via pipeline, marine vessels, railcar, and truck, the permittee shall record the amount loaded and calculate the emissions of VOC each month. The permittee shall calculate and maintain a record of the annual VOC emissions, in tons per year on a calendar year basis, for

a period of five (5) years following resumption of regular operations after startup of the PBOP Project. (Ref.: 40 CFR 52.21(r)(6)(iii))

- (18) The permittee shall submit a report to the DEQ if the annual emissions, in tons per year, from the projects covered by this permit, exceed the baseline actual emissions (as documented in the project application), by a significant amount for any regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained in the PBOP Project application. Such report shall be submitted to the DEQ within 60 days after the end of such year. The report shall contain the following:
  - (a) The name, address, and telephone number of the major stationary source;
  - (b) The annual emissions as calculated pursuant to 52.21(r)(6)(iii); and
  - (c) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as the why the emissions differ from the preconstruction projection).
     (Bof: 40 CEP 52 21(r)(6)(y))

(Ref.: 40 CFR 52.21(r)(6)(v))

(19) The permittee shall make the information required to be documented and maintained pursuant to §52.21(r)(6) available for review upon a request for inspection by DEQ or the general public pursuant to the requirements contained in §70.4(b)(3)(viii) of this chapter. (Ref.: 40 CFR 52.21(r)(7))

# NSPS Subpart QQQ – VOC Emissions from Petroleum Refinery Wastewater Systems

(20) Plants 79 and 80, the CCR Unit and Reformate Splitter Unit, are subject to and shall comply with the New Source Performance Standards (NSPS) for VOC Emissions from Petroleum Refinery Wastewater Systems (40 CFR Part 60, Subpart QQQ), and the General Provisions (40 CFR Part 60, Subpart A).

The provisions of this subpart apply to affected facilities located in petroleum refineries for which construction, modification, or reconstruction is commenced after May 4, 1987. An affected facility includes an individual drain system, an oil-water separator, or an aggregate facility.