

**STATE OF MISSISSIPPI  
AIR POLLUTION CONTROL  
PERMIT**

**TO CONSTRUCT AIR EMISSIONS EQUIPMENT**

**THIS CERTIFIES THAT**

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

**“Vacuum Resid Slurry Hydrocracking (VRSH) Project”**

has been granted permission to construct air emissions equipment to comply with the 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.

**MISSISSIPPI ENVIRONMENTAL QUALITY PERMIT BOARD**



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**AUTHORIZED SIGNATURE**

**MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY**

**Issued:** DEC 18 2007

**Permit No.: 1280-00058**

**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. NEW EMISSION POINTS  
VRSH PLANT EQUIPMENT LEAKS (CJ-001)**

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point CJ-001, equipment leaks from the Vacuum Resid Slurry Hydrocracking (VRSH) Plant.

The air emissions equipment shall be constructed to comply with the design criteria specified in the application to construct and the requirements specified below.

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

For Emission Point CJ-001, the permittee is subject to and shall comply with the applicable requirements of the *New Source Performance Standards (NSPS) 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 *General Provisions* (40 CFR Part 60, Subpart A).

The provisions of this subpart apply to affected facilities in petroleum refineries for which construction, reconstruction, or modification commences after November 7, 2006. A compressor is an affected facility, and the group of all equipment defined in §60.591a within a process unit is an affected facility. (Ref.: 40 CFR 60.590a(a)-(b))

**MACT Subpart CC – Petroleum Refineries**

For Emission Point CJ-001, the permittee is subject to and shall comply with the applicable requirements of the *National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries* (40 CFR Part 63, Subpart CC) and the applicable requirements of the *General Provisions* (40 CFR Part 63, Subpart A) as summarized in Table 6 of the appendix to 40 CFR Part 63, Subpart CC. Emission Point CJ-001 shall meet the requirements for an existing source in §63.648.

**PART II. NEW EMISSION POINTS  
VRSH PLANT WASTEWATER (CJ-002)**

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point CJ-002, the wastewater system in the VRSH Plant.

The air emissions equipment shall be constructed to comply with the design criteria specified in the application to construct and the requirements specified below.

**NSPS Subpart QQQ – Equipment Leaks of VOC in Petroleum Refineries**

For Emission Point CJ-002, the permittee is subject to and shall comply with the applicable requirements of 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).

1. 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 individual drain system, an oil-water separator, and an aggregate facility are each separate affected facilities. (Ref.: 40 CFR 60.690(a))
2. Notwithstanding the provisions of 40 CFR 60.14(e)(2), the construction or installation of a new individual drain system shall constitute a modification to an affected facility described in §60.690(a)(4). For purposes of this paragraph, a new individual drain system shall be limited to all process drains and the first common junction box. (Ref.: 40 CFR 60.690(b))
3. Stormwater sewer systems; ancillary equipment, which is physically separate from the wastewater system and does not come in contact with or store oily wastewater; and non-contact cooling water systems are not subject to the requirements of this subpart. The permittee shall demonstrate compliance with any of these exclusions as provided in §60.697(h), (i), and (j). (Ref.: 40 CFR 60.692-1(d))

**NESHAP Subpart FF – Benzene Waste Operations**

For Emission Point CJ-002, the permittee is subject to and shall comply with the applicable requirements of the *National Emission Standard for Benzene Waste Operations* (40 CFR Part 61, Subpart FF).

1. The provisions of this subpart apply to owners and operators of chemical manufacturing plants, coke by-product recovery plants, and petroleum refineries.

2. 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 paragraph §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 listed in §61.340(a). A hazardous waste treatment, storage, and disposal facility is a facility that must obtain a hazardous waste management permit under subtitle C of the Solid Waste Disposal Act.
3. At each facility identified in §61.340(a) or §61.340(b), the following waste is exempt from the requirements of this subpart:
  - (a) Waste in the form of gases or vapors that is emitted from process fluids.
  - (b) Waste that is contained in a segregated stormwater sewer system.
4. At each facility identified in §61.340(a) or §61.340(b), any gaseous stream from 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 from a waste management unit, treatment process, or wastewater treatment unit routed to a fuel gas system.

(Ref.: 40 CFR 61.340)

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

For Emission Point CJ-002, the permittee is subject to and shall comply with the applicable requirements of the *National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries* (40 CFR Part 63, Subpart CC) and the applicable requirements of the *General Provisions* (40 CFR Part 63, Subpart A) as summarized in Table 6 of the appendix to 40 CFR Part 63, Subpart CC. For any Group 1 wastewater stream, the permittee shall meet the requirements of §63.647. Any Group 1 wastewater stream managed in a piece of equipment that is also subject to the provisions of 40 CFR part 60, subpart QQQ, is required to comply only with MACT Subpart CC per §63.640(o).

**PART II. NEW EMISSION POINTS  
PROCESS HEATERS (CJ-003 through CJ-007)**

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment for the emission of air contaminants from the following process heaters located in the VRSR Plant.

- Emission Point CJ-003 – 13.42 MMBtu/hr Recycle Gas Heater, equipped with an ultra-low NO<sub>x</sub> burner (Facility Ref.: F-7700)
- Emission Point CJ-004 – 7.48 MMBtu/hr Vacuum Resid Heater, equipped with an ultra-low NO<sub>x</sub> burner (Facility Ref.: 7710)
- Emission Point CJ-005 – Two 6.82 MMBtu/hr Start-up Heaters sharing a common stack (Facility Ref.: 7720/7730)
- Emission Point CJ-006 – 6.27 MMBtu/hr Hot Light Vacuum Gas Oil (LVGO) Heater, equipped with an ultra-low NO<sub>x</sub> burner (Facility Ref.: 7740)
- Emission Point CJ-007 – 11.00 MMBtu/hr Vacuum Resid Pre-heater, equipped with an ultra-low NO<sub>x</sub> burner (Facility Ref.: 44X1)

The air emissions equipment shall be constructed to comply with the design criteria specified in the application to construct and the requirements specified below.

**FUEL RESTRICTION**

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

**NSPS Subpart J – Petroleum Refineries**

The permittee is subject to and shall comply with the applicable requirements of 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))

**INITIAL PERFORMANCE TEST**

Within 60 days after achieving the maximum production rate at which Emission Points CJ-003, CJ-004, CJ-006, and CJ-007 will be operated, but not later than 180 days after initial startup of each process heater, the permittee shall validate the emission factors used in the construction application for NO<sub>x</sub> and CO by stack testing in accordance with the specified method(s). The NO<sub>x</sub> and CO emission factors used in the application were 0.030 lb/MMBtu and 100 ppmvd, respectively.

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 each 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). Test results shall be submitted to the DEQ within sixty (60) days of completion of the required stack test.

**RECORDKEEPING AND REPORTING**

For Emission Points CJ-003 through CJ-007, the permittee shall record the average daily heat input in MMBtu/hr and the rolling 12-month average heat input in MMBtu/hr, calculated monthly. In the semiannual report required by Part III.3 below, the permittee shall note any 12-month average heat input that exceeds the stated firing rate of the unit.

**PART II. NEW EMISSION POINTS  
BOILER (CJ-008)**

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point CJ-008, the 90.75 MMBtu/hr Boiler (Facility Ref.: F-44X2), equipped with ultra-low NO<sub>x</sub> burners and supplying steam to the VRSH Plant.

The air emissions equipment shall be constructed to comply with the design criteria specified in the application to construct and the requirements specified below.

**FUEL RESTRICTION**

Fuels other than natural gas are prohibited.

**NSPS Subpart Dc – Small Industrial-Commercial-Institutional Steam Generating Units**

For Emission Point CJ-008, the owner or operator of an affected facility that combusts only natural gas shall record and maintain records of the amount of each fuel combusted during each calendar month. (Ref.: 40 CFR 60.48c(g)(2))

All records shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record. (Ref.: 40 CFR 60.48c(i))

**INITIAL PERFORMANCE TEST**

Within 60 days after achieving the maximum production rate at which Emission Point CJ-008 will be operated, but not later than 180 days after initial startup of CJ-008, the permittee shall validate the emission factors used in the construction application for NO<sub>x</sub> and CO by stack testing in accordance with the specified method(s). The NO<sub>x</sub> and CO emission factors used in the application were 0.030 lb/MMBtu and 100 ppmvd, respectively.

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). Test results shall be submitted to the DEQ within sixty (60) days of completion of the required stack test.

### **RECORDKEEPING AND REPORTING**

For Emission Point CJ-008, the permittee shall record the average daily heat input in MMBtu/hr and the rolling 12-month average heat input in MMBtu/hr, calculated monthly. In the semiannual report required by Part III, Condition 3 below, the permittee shall note any 12-month average heat input that exceeds the stated firing rate of the unit.

**PART II. NEW EMISSION POINTS  
FIRE WATER PUMPS (CJ-009 and CJ-010)**

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Points CJ-009 and CJ-010, two 460 brake horsepower (bhp) diesel fire water pump engines (Facility Ref.: P-7700 and P-7710) servicing the VRSH Plant.

The air emissions equipment shall be constructed to comply with the design criteria specified in the application to construct and the requirements specified below.

**NSPS Subpart III – Stationary Compression Ignition (CI) Internal  
Combustion Engines (ICE)**

For Emission Points CJ-009 and CJ-010, the permittee is subject to and shall comply with the applicable requirements of the *New Source Performance Standards for Stationary Compression Ignition Internal Combustion Engines* (40 CFR Part 60, Subpart III) and the *General Provisions* (40 CFR Part 60, Subpart A) as specified in Table 8 of NSPS Subpart III. Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants. (Ref. §60.4205(c))

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards required by §60.4205(c) according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer over the entire life of the engine. (Ref. §60.4206)

**Fuel Requirements:**

Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a). (Ref.: §60.4207(a))

Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that used diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel. (Ref.: §60.4207(b))

**Monitoring Requirements:**

For Emission Points CJ-009 and CJ-010, the permittee shall install a non-resettable hour meter prior to startup of the engine. (Ref.: §60.4209(a))

**Compliance Requirements:**

If Emission Points CJ-009 and CJ-010 are manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards in §60.4205(c), the permittee shall comply by purchasing an engine certified to the emission standards specified in §60.4205(c) for the same model year and NFPA nameplate engine power. The engine must be installed and configured according to the manufacturer's specifications. (Ref.: §60.4211(c))

Emission Points CJ-009 and CJ-010 may be operated for the purposes of maintenance checks and readiness testing, provided that the tests are recommended by the Federal, State, or local government, the manufacturer, the vendor, of the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. There is no time limit on the use of the emergency stationary ICE in emergency situations. Anyone may petition the DEQ for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency ICE beyond 100 hours per year. Any operation other than emergency operation, and maintenance and testing as permitted in this section, is prohibited. (Ref.: §60.4211(e))

**PART II. NEW EMISSION POINTS  
COOLING TOWER (CJ-011)**

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point CJ-011, the VRSH Cooling Tower (Facility Ref.: E-7700) servicing the VRSH Plant.

The air emissions equipment shall be constructed to comply with the design criteria specified in the application to construct, including a drift factor of 0.001%.

**PART II. NEW EMISSION POINTS  
FLARE (CJ-012)**

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from Emission Point CJ-012, the VRSH Flare (Facility Ref.: F-7770) servicing the VRSH Plant. To prevent routine flaring, the flare is equipped with a flare gas recovery system.

The air emissions equipment shall be constructed to comply with the design criteria specified in the application to construct and the requirements specified below.

**NSPS Subpart J – Petroleum Refineries**

For Emission Point CJ-012, the permittee is subject to and shall comply with the applicable requirements of 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))

**PART II. NEW EMISSION POINTS  
STORAGE TANKS AND PROCESS VESSELS**

Beginning upon permit issuance, the permittee is authorized to construct air emissions equipment and emit air contaminants from the following storage tanks and process vessels located in the VRSR Plant.

TANK ID	CONTENTS	VOLUME (GAL)	VENTING OF EMISSIONS
T-44XB	Hydrocarbons	265,200	Vents to the Flare Gas Recovery System
T-44XD	Hydrocarbons	336,000	Fixed Roof venting to atmosphere
T-44XF		21,000	
T-44XG	Hydrocarbons	5,040	Internal Floating Roof venting to atmosphere
T-44XH	Hydrocarbons	84,000	Vents to the Flare Gas Recovery System
T-44XI		126,000	
T-44XJ	Hydrocarbons	31,500	Internal Floating Roof venting to atmosphere
T-44XK	Hydrocarbons	42,000	Vents to the Flare Gas Recovery System
T-44XL	Hydrocarbons	21,000	Internal Floating Roof venting to atmosphere
T-44XM	Aqueous Ammonia	15,750	Ammonia vents to scrubber then to atmosphere
T-44XN		18,900	
T-44XO		205,800	
T-7500	Boiler Feed Water	67,000	Non-VOC/Non-HAP, vents to the atmosphere
T-7517	Sour Water	67,000	Vents to the Flare Gas Recovery System
T-7501	Process Water	240	Non-VOC/Non-HAP, vents to the atmosphere
V-7625	Aqueous Salt Solution	160	Non-VOC/Non-HAP, vents to the atmosphere
V-7630		40	
V-7633		40	
V-7656	Aqueous Salt Solution	160	Ammonia vents to scrubber then to atmosphere
V-7694	Sulfuric Acid	4,687	Ammonia vents to scrubber then to atmosphere
T-7601A	Aqueous Ammonia Slurry	1,640	Ammonia vents to scrubber then to atmosphere
T-7601B		1,640	
T-7601C		1,640	
T-7602		7,916	
T-7603		8,252	
T-7604		3,814	
T-7605		Aqueous Ammonia Salt Solution	
T-7606	Aqueous Ammonia Salt Solution	1,880	Non-VOC/Non-HAP, vents to the atmosphere
T-7609	Aqueous Ammonia Salt Solution	16,086	Ammonia vents to scrubber then to atmosphere
T-7612		16,185	
T-7613	Hydrocarbons	411	Vents to the Flare Gas Recovery System
T-7614		411	
T-7618	Aqueous Ammonia Salt Solution	10,095	Ammonia vents to scrubber then to atmosphere
T-7620	Hydrocarbons	509	Vents to the Flare Gas Recovery System
T-7629	Aqueous Ammonia Salt Solution	988	Vents to acid scrubber then to atmosphere
T-7633	Acidic Salt Solution	833	Ammonia vents to scrubber then to atmosphere
T-7634	Aqueous Ammonia Salt Solution	833	Ammonia vents to scrubber then to atmosphere
T-7635		1,038	

TANK ID	CONTENTS	VOLUME (GAL)	VENTING OF EMISSIONS
T-7636	Clay Slurry	785	Ammonia vents to scrubber then to atmosphere
T-7637	Aqueous Ammonia Salt Solution	714	Ammonia vents to scrubber then to atmosphere
T-7638	Clay Slurry	166	Non-VOC/Non-HAP, vents to the atmosphere
T-7644	Aqueous Ammonia Salt Solution	175	Ammonia vents to scrubber then to atmosphere
T-7648	Acid Salt Solution	611	Ammonia vents to scrubber then to atmosphere
T-7649		611	
T-7650		1,112	
T-7652		3,275	
T-7660	Hydrocarbons	171	Vents to the Flare Gas Recovery System
T-7664	Aqueous Ammonia Salt Solution	411	Ammonia vents to scrubber then to atmosphere
T-7665		402	
T-7666	Clay Slurry	411	Ammonia vents to scrubber then to atmosphere
T-7667	Aqueous Ammonia Salt Solution	411	Ammonia vents to scrubber then to atmosphere
T-7668	Acidic Salt Solution	4,235	Ammonia vents to scrubber then to atmosphere
T-7669	Aqueous Ammonia Salt Solution	509	Ammonia vents to scrubber then to atmosphere
T-7672	Aqueous Ammonia	4,229	Ammonia vents to scrubber then to atmosphere
T-7673	Aqueous Ammonia Salt Solution	42	Ammonia vents to scrubber then to atmosphere
T-7674		23,610	
T-7675	Process Water	969	Non-VOC/Non-HAP, vents to the atmosphere
T-7680	Sulfuric Acid	233	Ammonia vents to scrubber then to atmosphere
T-7681	Aqueous Acid Solution	458	Vents to atmosphere (sulfuric acid emissions)
T-7682		458	
T-7686	Process Water	2,321	Non-VOC/Non-HAP vents to the atmosphere
T-7687	Aqueous Ammonia	14,666	Ammonia vents to scrubber then to atmosphere
T-7690		844	
T-7692	Rainwater Collection Sump	679	Non-VOC/Non-HAP, vents to the atmosphere

The air emissions equipment shall be constructed to comply with the design criteria specified in the application to construct and the requirements specified below.

### MACT Subpart CC – Petroleum Refineries

Tanks T-44XB, T-44XD, T-44XF, T-44XH, T-44XI, T-44XJ, T-44XK, and T-44XL are subject to and shall comply with the applicable requirements of the *National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries* (40 CFR Part 63, Subpart CC) and the applicable requirements of the *General Provisions* (40 CFR Part 63, Subpart A) as summarized in Table 6 of the appendix to 40 CFR Part 63, Subpart CC. These tanks meet the definition of *Group 2 storage vessels*, as defined in §63.641.

**MACT Subpart EEEE – Organic Liquid Distribution**

Tanks T-44XG, T-7613, T-7614, T-7620, and T-7660 are subject to and shall comply with the applicable requirements of the *National Emission Standards for Hazardous Air Pollutants: Organic Liquid Distribution (Non-Gasoline)* (40 CFR Part 63, Subpart EEEE) and the applicable requirements of the *General Provisions* (40 CFR Part 63, Subpart A) as summarized in Table 12 of the appendix to 40 CFR Part 63, Subpart EEEE. These tanks have limited requirements, as specified in §63.2343.

### **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 the information specified in herein by July 31 and January 31 for the preceding six-month period. All instances of deviations from permit requirements must be clearly identified in such reports and a responsible official must certify all required reports.

#### **Recordkeeping/Reporting of Actual Emissions for Hydrogen II and III Plants**

- (4) For Hydrogen II (Plant 64) and Hydrogen III (Plant 86), the permittee shall monitor the emissions of any regulated NSR pollutant that could increase as a result of the VRSH Project and that is emitted by the following emission units:
  - Emission Point BH-231, the Hydrogen II, 730 MMBtu/hr process heater with three stacks (Facility Ref.: F-6410)
  - Emission Point BH-232, the Hydrogen II, 217 MMBtu/hr natural gas turbine (Facility Ref.: KGT-6410)
  - Emission Point BT-441, the Hydrogen III, 780 MMBtu/hr process heater with three stacks and the 270 MMBtu/hr gas turbine, which vents to the process heater (Facility Ref.: F-8620 and KGT-8650)
  - Emission Point BT-542, the Hydrogen III, 38 MMBtu/hr feedstock furnace (Facility Ref.: F-8610)

The permittee shall calculate and maintain a record of the annual 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 VRSH Project. (Ref.: 40 CFR 52.21(r)(6)(iii))

- (5) The permittee shall submit a report to the DEQ if the annual emissions, in tons per year, from the VRSH Project, exceed the baseline actual emissions (as

documented in the VRSH 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 VRSH 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 to why the emissions differ from the preconstruction projection).

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

- (6) 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 of the general public pursuant to the requirements contained in §70.4(b)(3)(viii) of this chapter. (Ref.: 40 CFR 52.21(r)(7))

**MACT Subpart CC – Petroleum Refineries**

- (7) For the VRSH Plant, the permittee is subject to and shall comply with the applicable requirements of the *National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries* (40 CFR Part 63, Subpart CC) and the applicable requirements of the *General Provisions* (40 CFR Part 63, Subpart A) as summarized in Table 6 of the appendix to 40 CFR Part 63, Subpart CC.
  - (a) This subpart applies to petroleum refining process units and to related emission points that are specified in paragraphs §63.640(c)(5) through (c)(7) that are located at a plant site that meet the criteria in §63.640(a)(1) and (a)(2). (Ref.: §63.640(a))
  - (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) of this section that are located at a single refinery plant site. (Ref.: §63.640(c))
  - (c) The affected source subject to this subpart does not include the emission points listed in §63.640(d)(1) through (d)(5). (Ref.: §63.640(d))