

**PROPOSED**

Issuance Date

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15-xxxE CAB  
File No. 0088-23

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Mr. Jon Mauer  
Refinery Manager  
Chevron USA Products Company  
Hawaii Refinery  
91-480 Malakole Street  
Kapolei, Hawaii 96707-1807

Dear Mr. Mauer:

**Subject: Amendment of Covered Source Permit (CSP) No. 0088-01-C  
Significant Modification Application No. 0088-23  
Chevron USA Products Company  
Petroleum Refinery - Catalytic Oxidation Unit  
Located At: 91-480 Malakole Street, Kapolei, Oahu  
Date of Expiration: June 27, 2011 (this date is to be revised upon issuance  
of the renewal for CSP No. 0088-01-C)**

In accordance with Hawaii Administrative Rules, Chapter 11-60.1, and pursuant to your application for a Significant Modification dated November 17, 2014, and additional information dated November 18, 2014, and January 9, 2015, the Department of Health (herein referred to as Department) hereby amends CSP No. 0088-01-C issued to Chevron USA Products Company. The amendment allows the construction and operation of a Catalytic Oxidation Unit that will be used to treat the offgas from the refinery's Foul Water Treatment Plant.

The enclosed amended Attachment II(A): Special Conditions for Miscellaneous Process Units and Source Operations supersedes the corresponding Attachment II(A) issued with CSP No. 0088-01-C on February 22, 1999, and amended on January 22, 2002, April 16, 2002, March 3, 2003, June 28, 2006, April 24, 2007, August 13, 2007, November 8, 2007, July 22, 2008, September 11, 2009, November 4, 2009, April 22, 2013, and September 30, 2014. All other permit conditions issued with CSP No. 0088-01-C shall not be affected and shall remain valid.

If there are any questions regarding these matters, please contact Mr. Darin Lum of the Clean Air Branch at (808) 586-4200.

Sincerely,

STUART YAMADA, P.E., CHIEF  
Environmental Management Division

DL:dh

c: CAB Monitoring Section

**ATTACHMENT II(A): SPECIAL CONDITIONS  
COVERED SOURCE PERMIT NO. 0088-01-C  
MISCELLANEOUS PROCESS UNITS AND SOURCE OPERATIONS**

**Amended Date:**

**Expiration Date: June 27, 2011<sup>3</sup>**

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility.

**Section A. Equipment Description.**

1. This portion of the Covered Source Permit encompasses the requirements for miscellaneous process units and/or source operations not included with the Special Conditions of Attachments II(B) through II(M).

(Auth.: HAR §11-60.1-3)

**Section B. Applicable Federal Regulations.**

1. The FCC Unit, Crude Unit, LPG Refrigeration System, Dimersol Plant and Cogeneration Plant Compressor are subject to the provisions of the following federal regulations:
  - a. 40 CFR Part 60, New Source Performance Standards (NSPS):
    - i. Subpart A, General Provisions; and
    - ii. Subpart GGG, Standards of Performance for Equipment Leaks in Petroleum Refineries.

The permittee shall comply with all applicable requirements of these standards, including all emission limits, notification, reporting, monitoring, testing, and recordkeeping requirements. The major requirements of these standards are detailed in the special conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.1, §60.590)<sup>1</sup>

2. The Crude Unit Furnaces and Desalter and the Cogeneration Plant are subject to the provisions of the following federal regulations:
  - a. 40 CFR Part 60, New Source Performance Standards (NSPS):
    - i. Subpart A, General Provisions; and
    - ii. Subpart QQQ, Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater Systems.

The permittee shall comply with all applicable requirements of these standards, including all emission limits, notification, reporting, monitoring, testing and recordkeeping requirements. The major requirements of these standards are detailed in the special conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.1, §60.690)<sup>1</sup>

3. The FCC Unit, Crude Unit, Blending and Shipping Area, Dimersol Plant, Cogeneration Plant Compressor and Liquid Fuel System, Alkylation Plant and Effluent Treatment Plant are subject to the provisions of the following federal regulations:
  - a. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT):
    - i. Subpart A, General Provisions; and
    - ii. Subpart CC, National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries.

The permittee shall comply with all applicable requirements of these standards, including all emission limits, notification, reporting, monitoring, testing and recordkeeping requirements. The major requirements of these standards are detailed in the special conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11.60.1-174, 40 CFR §63.640)<sup>1</sup>

4. The storage and use of flammable substances in this facility is subject to the provisions of 40 CFR Part 68, Chemical Accident Prevention Provisions. The permittee shall comply with all applicable requirements, including the submittal of:
  - a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a); or
  - b. As part of the compliance certification submitted pursuant to Attachment I, Standard Condition No. 28, a certification statement that the facility is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan.

(Auth.: HAR §11-60.1-3, §11-60.1-90, 40 CFR §68)<sup>1</sup>

5. The Catalytic Oxidation Unit is subject to the provisions of the following federal regulations:
  - a. 40 CFR Part 60, New Source Performance Standards (NSPS):
    - i. Subpart A, General Provisions; and
    - ii. Subpart Ja, Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007.

The permittee shall comply with all applicable requirements of these standards, including all emission limits, notification, reporting, monitoring, testing and recordkeeping requirements. The major requirements of these standards are detailed in the special conditions of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.1, §60.100a)<sup>1</sup>

**Section C. Operational and Emission Limitations.**

1. All pumps and compressors handling volatile organic compounds having a Reid Vapor Pressure (RVP) of 1.5 pounds per square inch (psi) or greater which can be fitted with mechanical seals shall have mechanical seals or other equipment of equal efficiency for purposes of air pollution control as may be approved by the Department. Pumps and compressors not capable of being fitted with mechanical seals, such as reciprocating pumps, shall be fitted with the best sealing system available for air pollution control given the particular design of pump or compressor as may be approved by the Department.

(Auth.: HAR §11-60.1-3, §11-60.1-41, §11-60.1-90)

2. The permittee shall not cause or allow the emissions of gas streams containing volatile organic compounds from a vapor blowdown system unless these gases are burned by smokeless flares, or abated by an equally effective control device as approved by the Department.

(Auth.: HAR §11-60.1-3, §11-60.1-42, §11-60.1-90)

3. Compressor

- a. Each compressor located at the FCC Unit, Crude Unit, LPG Refrigeration System, Dimersol Plant and the Cogeneration Plant shall be equipped and operated with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR §60.482-1(c), 40 CFR §60.482-3(h) and 40 CFR §60.482-3(i).
- b. Each compressor seal system as required in Special Condition No. C.3.a of this Attachment shall be as follows:
  - i. Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
  - ii. Equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of 40 CFR §60.482-10.
  - iii. Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
- c. The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.
- d. A compressor is exempt from the requirements of Special Condition No. C.3.a and C.3.b of this Attachment if it is equipped with a closed vent system capable of

capturing and transporting any leakage from the seal to a control device that complies with the requirements of 40 CFR §60.482-10, except as provided in Special Condition No. C.3.e of this Attachment.

- e. Any compressor that is designated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by methods specified in 40 CFR §60.485(c) and is tested for compliance initially upon designation, annually, and at other times requested by the Department is exempt from the requirements of Special Condition Nos. C.3.a through C.3.d and D.3.a and D.3.b of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592)<sup>1</sup>

#### 4. Pressure Relief Devices in Gas/Vapor Service

- a. Except during pressure releases, each pressure relief device in gas/vapor service located at the FCC Unit, Crude Unit, LPG Refrigeration System, Dimersol Plant and the Cogeneration Plant Compressor shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR §60.485(c).
- b. *After each pressure release*, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, **as soon as practicable**, but no later than five (5) calendar days *after the pressure release*, except as provided in Special Condition No. C.8 of this Attachment.
- c. Any pressure relief device is exempt from the requirements of Special Condition No. C.4.a and C.4.b of this Attachment if it is equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device that complies with the requirements of 40 CFR §60.482-10.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592)<sup>1</sup>

#### 5. Open Ended Valves/Lines

- a. Each open-ended valve or line at the FCC Unit, Crude Unit, LPG Refrigeration System, Dimersol Plant, Cogeneration Plant Compressor and Liquid Fuel System, Blending and Shipping Area, Alkylation Plant and the Effluent Treatment Plant shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR §60.482-1(c). The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
- b. Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

- c. When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Special Condition No. C.5.a of this Attachment at all other times.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

#### 6. Sampling Connection Systems

- a. Each sampling connection system at the FCC Unit, Crude Unit, LPG Refrigeration System, Dimersol Plant, Cogeneration Plant Compressor and Liquid Fuel System, Blending and Shipping Area, Alkylation Plant and the Effluent Treatment Plant shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in 40 CFR §60.482-1(c).
- b. Each closed-purged, closed-loop, or closed-vent system shall comply with the following requirements:
  - i. Return the purged process fluid directly to the process line; or
  - ii. Collect and recycle the purged process fluid to a process; or
  - iii. Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR §60.482-10.
- c. In situ sampling systems and sampling systems without purges are exempt from the requirements of Special Condition No. C.6.a and C.6.b of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

#### 7. Individual Drain Systems

- a. Sewer drains located at the Cogeneration Plant and Crude Unit Furnaces and Desalter shall be equipped with water seal controls.
- b. Junction boxes located at the Cogeneration Plant shall be equipped with a cover and may have an open vent pipe at least three (3) feet (90 cm) in length and shall not exceed four (4) inches (10.2 cm) in diameter.
- c. Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.
- d. Sewer lines located at the Cogeneration Plant and Crude Unit Furnaces and Desalter shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.
- e. Refinery wastewater routed through new process drains and a new first common downstream junction box at the Cogeneration Plant either as part of a new individual drain system or an existing individual drain system, shall not be routed through a downstream catch basin.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2)<sup>1</sup>

8. Delay of Repair

- a. Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
- b. Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.
- c. Delay of repair for valves will be allowed if:
  - i. The permittee demonstrates that emissions of purged material resulting from the immediate repair are greater than the fugitive emissions likely to result from the delay of repair; and
  - ii. When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with the requirements of 40 CFR §60.482-10.
- d. Delay of repair for pumps will be allowed if:
  - i. Repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and
  - ii. Repair is completed as soon as practicable, but not later than six (6) months after the leak was detected.
- e. Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than six (6) months after the first process unit shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

9. Catalytic Oxidation Unit - Offgas

- a. The offgas from the Foul Water Treatment Plant shall be routed to the Catalytic Oxidation Unit at all times, except during periods of maintenance, in which the foul water shall be stored in permitted storage tanks.
- b. The permittee shall not oxidize in the Catalytic Oxidation Unit any offgas from the Foul Water Treatment Plant that contains H<sub>2</sub>S in excess of 162 ppmv determined hourly on a three-hour (3-hour) rolling average basis and H<sub>2</sub>S in excess of sixty (60) ppmv determined daily on a 365 successive calendar day rolling average basis.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.102a(g)(1)(ii))<sup>1</sup>

10. Catalytic Oxidation Unit – Visible Emissions

For any six (6) minute averaging period, the Catalytic Oxidation Unit shall not exhibit visible emissions of twenty (20) percent opacity or greater, except as follows: during start-up, shut-down, or equipment breakdown, the Catalytic Oxidation Unit may exhibit visible emissions not greater than sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90)

11. Catalytic Oxidation Unit – Maximum Emission Limits

The permittee shall not discharge or cause the discharge into the atmosphere from the Catalytic Oxidation Unit emissions in excess of the following emission limits:

| Pollutant       | Emission Limits (lb/hr) <sup>1</sup> |
|-----------------|--------------------------------------|
| NO <sub>x</sub> | 7.0                                  |
| CO              | 7.4                                  |
| VOC             | 0.63                                 |

<sup>1</sup> Based on a 3-hr average

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

12. Foul Water Treatment Plant

The permittee shall maintain the pH of the Foul Water Treatment Plant effluent water greater than or equal to nine (9) and the temperature of the Foul Water Treatment Plant effluent water between 210 °F and 250 °F. The permittee shall also maintain the H<sub>2</sub>S concentration of the Foul Water Treatment Plant offgas less than five (5) ppm.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

**Section D. Monitoring and Recordkeeping Requirements.**

1. All records, including support information, shall be maintained at the facility for at least five (5) years from the date of the monitoring samples, measurements, tests, reports, or application. Support information includes all calibration and maintenance records and copies of all reports required by the permit. These records shall be in a permanent form suitable for inspection and made available to the Department or their representatives upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

2. Pumps in Light Liquid Service

- a. Each pump in light liquid service at the FCC Unit, Crude Unit, LPG Refrigeration System, Dimersol Plant, Cogeneration Plant Compressor and Liquid Fuel System, Blending and Shipping Area, Alkylation Plant and the Effluent Treatment Plant shall be monitored **monthly** to detect leaks in accordance with the requirements set forth in 40 CFR §60.485(b), except as provided in 40 CFR §60.482-1(c) and 40 CFR §60.482-2(d), (e) and (f).
- b. Each pump in light liquid service at the FCC Unit, Crude Unit, LPG Refrigeration System, Dimersol Plant, Cogeneration Plant Compressor and Liquid Fuel System, Blending and Shipping Area, Alkylation Plant, and the Effluent Treatment Plant shall be checked by visual inspection **each calendar week** for indications of liquids dripping from the pump seal.
- c. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- d. If there are indications of liquids dripping from the pump seal, a leak is detected.
- e. When a leak is detected, it shall be repaired **as soon as practicable, but not later than fifteen (15) calendar days after it is detected**, except as provided in Special Condition No. C.8 of this Attachment. A first attempt at repair shall be made **no later than five (5) calendar days after each leak is detected**.
- f. Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Special Condition No. D.2.a of this Attachment provided the requirements of 40 CFR §60.482-2(d)(1) through (6) are met.
- g. Any pump that is designated for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Special Condition Nos. D.2.a, D.2.b, D.2.e, and D.2.f of this Attachment if the pump:
  - i. Has no externally actuated shaft penetrating the pump housing;
  - ii. Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 CFR §60.485(c); and
  - iii. Is tested for compliance with Special Condition No. 2.g.ii of this Attachment initially upon designation, annually, and at other times requested by the Department.
- h. If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of 40 CFR §60.482-10, it is exempt from the requirements of Special Condition Nos. D.2.a through D.2.g of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

3. Compressors

- a. Each compressor barrier fluid system shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both. Each sensor shall be checked **daily** or shall be equipped with an audible alarm. If the sensor indicates failure of the seal system, the barrier system, or both, a leak is detected.

- b. When a leak is detected, it shall be repaired **as soon as practicable, but not later than fifteen (15) calendar days** after it is detected, except as provided in Special Condition No. C.8 of this Attachment. A first attempt at repair shall be made **no later than five (5) calendar days** after each leak is detected.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592)<sup>1</sup>

4. Pressure Relief Devices in Gas/Vapor Service

**No later than five (5) calendar days** after a pressure release, the pressure relief device subject to the requirements of 40 CFR Part 60, Subpart GGG shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR §60.485(c).

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592)<sup>1</sup>

5. Valves in Light Liquid Service and in Gas/Vapor Service

- a. Each valve in light liquid service at the FCC Unit, Crude Unit, LPG Refrigeration System, Dimersol Plant, Cogeneration Plant Compressor and Liquid Fuel System, Blending and Shipping Area, Alkylation Plant and Effluent Treatment Plant shall be monitored **monthly** to detect leaks in accordance with the requirements set forth in 40 CFR §60.485(b).
- b. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- c. Any valve for which a leak is *not detected for two (2) successive months* may be monitored the **first month of every quarter**, beginning with the next quarter, *until a leak is detected*. If a leak is detected, the valve shall be monitored **monthly** until a leak is not detected for two (2) successive months.
- d. When a leak is detected, it shall be repaired **as soon as practicable, but not later than fifteen (15) calendar days** after it is detected, except as provided in Special Condition No. C.8 of this Attachment. A first attempt at repair shall be made **no later than five (5) calendar days** after each leak is detected.
- e. First attempts at repair include, but are not limited to, the following best practices where practicable:
  - i. Tightening of bonnet bolts;
  - ii. Replacement of bonnet bolts;
  - iii. Tightening of packing gland nuts; and
  - iv. Injection of lubricant into lubricated packing.
- f. Any valve that is designated, as described in 40 CFR §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Special Condition No. D.5.a of this Attachment if the valve:

- i. Has no external actuating mechanism in contact with the process fluid;
- ii. Is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR §60.485(c); and
- iii. Is tested for compliance with the Special Condition No. D.5.f.ii of this Attachment initially upon designation, annually, and at other times requested by the Department.

- g. Any valve that is designated, as described in 40 CFR §60.486(f)(1), as unsafe-to-monitor valve and satisfies the criteria outlined in 40 CFR §60.482-7(g) is exempt from the requirements of Special Condition No. D.5.a of this Attachment.
- h. Any valve that is designated, as described in 40 CFR §60.486(f)(2), as difficult-to-monitor valve and satisfies the criteria outlined in 40 CFR §60.482-7(h) is exempt from the requirements of Special Condition No. D.5.a of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

- 6. Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Flanges and other Connectors
  - a. Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors at the FCC Unit, Crude Unit, LPG Refrigeration System, Dimersol Plant, Cogeneration Plant Compressor and Liquid Fuel System, Blending and Shipping Area, Alkylation Plant and Effluent Treatment Plant shall be monitored **within five (5) days** by the method specified in 40 CFR §60.485(b) *if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.*
  - b. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
  - c. *When a leak is detected*, it shall be repaired **as soon as practicable, but not later than fifteen (15) calendar days after it is detected**, except as provided in Special Condition No. C.8 of this Attachment. The first attempt at repair shall be made **no later than five (5) calendar days after each leak is detected.**
  - d. First attempts at repair include, but are not limited to, the best practices described in Special Condition No. D.5.e of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

- 7. *When each leak is detected*, a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

- 8. The identification on a valve may be removed after it has been monitored for two (2) successive months as specified in Special Condition No. D.5.c of this Attachment and no leak has been detected during those two (2) months. The identification on equipment except a valve may be removed after it has been repaired.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

9. *When each leak is detected*, the following information shall be recorded in a log and shall be kept for two (2) years in a readily accessible location:
- a. The instrument and operator identification numbers and the equipment identification number;
  - b. The date the leak was detected and the dates of each attempt to repair the leak;
  - c. Repair methods applied in each attempt to repair the leak;
  - d. "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm;
  - e. "Repair delayed" and the reason for the delay if a leak is not repaired within fifteen (15) calendar days after discovery of the leak;
  - f. The signature of the permittee whose decision it was that repair could not be effected without a process shutdown;
  - g. The expected date of successful repair of the leak if a leak is not repaired within fifteen (15) days;
  - h. Dates of process unit shutdown that occur while the equipment is unrepaired; and
  - i. The date of successful repair of the leak.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

10. The following information pertaining to all equipment subject to the requirements of 40 CFR Part 60, Subpart GGG, or 40 CFR Part 63, Subpart CC, shall be recorded in a log that is kept in a readily accessible location:
- a. A list of identification numbers for all equipment;
  - b. A list of identification numbers for equipment that are designated for no detectable emissions which is signed by the permittee;
  - c. A list of equipment identification numbers for pressure relief devices required to comply with the requirements of Special Condition No. C.4 of this Attachment;
  - d. The dates of each compliance test used to determine no detectable emissions:
    - i. The background level measured during each compliance test; and
    - ii. The maximum instrument reading measured at the equipment during each compliance test.
  - e. A list of identification numbers for equipment in vacuum service.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

11. The following information pertaining to all valves subject to the requirements of 40 CFR Part 60, Subpart GGG, or 40 CFR Part 63, Subpart CC, shall be recorded in a log that is kept in a readily accessible location:

- a. A list of identification numbers for valves that are designated as unsafe-to-monitor, an explanation for each valve stating why the valve is unsafe-to-monitor, and the plan for monitoring each valve; and
- b. A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

12. The following information shall be recorded in a log that is kept in a readily accessible location:

- a. Design criterion based on design considerations and operating experience indicating the failure of the seal system, barrier fluid system, or both of each affected pump or compressor.
- b. Any changes to this criterion and the reasons for the changes.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

13. Each drain in active service at the Cogeneration Plant and Crude Unit Furnaces and Desalter shall be checked by visual inspection or physical inspection **initially and monthly** thereafter for indications of low water levels or other conditions that would reduce the effectiveness of the water seal controls.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2)<sup>1</sup>

14. Except for out of service drains where a tightly sealed cap or plug is installed, each drain out of active service shall be checked by visual or physical inspection **initially and weekly** thereafter for indications of low water levels or other problems that could result in VOC emissions. Drains having tightly sealed caps or plugs shall be inspected initially and semiannually to ensure caps or plugs are in place and properly installed.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2)<sup>1</sup>

15. *Whenever low water levels or missing or improperly installed caps or plugs are identified,* water shall be added or first efforts at repair shall be made **as soon as practicable**, but not later than twenty-four (24) hours after detection unless it is determined to be technically impossible without a complete or partial refinery or process unit shutdown. In such instances, repair shall occur before the end of the next refinery or process unit shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2, §60.692-6)<sup>1</sup>

16. Junction boxes located at the Cogeneration Plant shall be visually inspected **initially and semiannually** thereafter to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2)<sup>1</sup>

17. *If a broken seal or gap is identified*, first effort at repair shall be made **as soon as practicable, but not later than fifteen (15) calendar days** after the broken seal or gap is identified unless it is determined to be technically impossible without a complete or partial refinery or process unit shutdown. In such instances, repair shall occur before the end of the next refinery or process unit shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2, §60.692-6)<sup>1</sup>

18. The portion of each unburied sewer line located at the Cogeneration Plant and Crude Unit Furnaces and Desalter shall be visually inspected **initially and semiannually** for indication of cracks, gaps, or other problems that could result in VOC emissions.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2)<sup>1</sup>

19. *Wherever cracks, gaps, or other problems are detected*, repairs shall be made **as soon as practicable, but not later than fifteen (15) calendar days** after identification unless it is determined to be technically impossible without a complete or partial refinery or process unit shutdown. In such instances, repair shall occur before the end of the next refinery or process unit shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.692-2, §60.692-6)<sup>1</sup>

20. Before using any individual drain system installed in compliance with 40 CFR §60.692-2, the permittee shall inspect such equipment for indications of potential emissions, defects, or other problems that may cause the requirements of 40 CFR Part 60, Subpart QQQ not to be met. Points of inspection include, but are not limited to, seals, flanges, joints, gaskets, hatches, caps, and plugs.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.696)<sup>1</sup>

21. For each individual drain systems subject to the requirements of 40 CFR §60.692-2, the location, date, and corrective action shall be recorded for each drain when the water seal is dry or otherwise breached, when a drain cap or plug is missing or improperly installed, or other problem is identified that could result in VOC emissions during the initial and periodic visual or physical inspection.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.697)<sup>1</sup>

22. For junction boxes subject to the requirements of 40 CFR §60.692-2, the location, date, and corrective action shall be recorded for each inspection when a broken seal, gap, or other problem is identified that could result in VOC emissions.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.697)<sup>1</sup>

23. For each sewer line subject to the requirements of 40 CFR §60.692-2, the location, date, and corrective action shall be recorded for inspections when a problem is identified that could result in VOC emissions.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.697)<sup>1</sup>

24. Catalytic Oxidation Unit – H<sub>2</sub>S Monitoring

- a. 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 offgas from the Foul Water Treatment Plant before being oxidized in the Catalytic Oxidation Unit.
- b. The permittee may apply for an exemption from the H<sub>2</sub>S monitoring requirements described above for a fuel gas stream that is inherently low in sulfur content. A fuel gas stream that is demonstrated to be low-sulfur is exempt from the H<sub>2</sub>S monitoring requirements described above until there are changes in operating conditions or stream composition.
  - i. The permittee shall submit to the Department and U.S. EPA Region 9 a written application for an exemption from monitoring. The application must contain the following information:
    - (1) A description of the fuel gas stream/system to be considered, including submission of a portion of the appropriate piping diagrams indicating the boundaries of the fuel gas stream/system and the affected fuel gas combustion device(s) or flare(s) to be considered;
    - (2) A statement that there are no crossover or entry points for sour gas (high H<sub>2</sub>S content) to be introduced into the fuel gas stream/system;
    - (3) An explanation of the conditions that ensure low amounts of sulfur in the fuel gas stream (i.e., control equipment or product specifications) at all times;
    - (4) The supporting test results from sampling the fuel gas stream/system demonstrating that the sulfur content is less than five (5) ppm H<sub>2</sub>S; and
    - (5) A description of how the two (2) weeks of monitoring results compares to the typical range of H<sub>2</sub>S concentration expected for the fuel gas stream/system going to the affected fuel gas combustion device or flare.
  - ii. The effective date of the exemption is the date of submission of the information required above.
  - iii. No further action is required unless refinery operating conditions change in such a way that affects the exempt fuel gas stream/system (e.g., the stream composition changes). If such a change occurs, the permittee shall follow the procedures in 40 CFR §60.107a(b)(3).

- c. The permittee shall keep records of the specific exemption determined to apply for each fuel stream that is exempted. The permittee shall keep a copy of the application as well as the letter from the Department and U.S. EPA Region 9 granting approval of the application.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.107a(a)(2), §60.107a(b), §60.108a(c))<sup>1</sup>

25. Catalytic Oxidation Unit - Visible Emissions (VE)

The permittee shall conduct **monthly** (calendar month) VE observations for the Catalytic Oxidation Unit by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9, or U.S. EPA approved equivalent methods, or alternate methods with prior written approval from the Department. For each month, two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals. Records shall be completed and maintained in accordance with the **Visible Emissions Form Requirements**.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90)

26. Catalytic Oxidation Unit – Continuous Process Monitoring System for NO<sub>x</sub> and NH<sub>3</sub>

The permittee shall install, operate, calibrate, and maintain a continuous process monitoring system including two NO<sub>x</sub> analyzers, for continuously monitoring and recording the NO<sub>x</sub> and NH<sub>3</sub> concentrations downstream of the Catalytic Oxidation Unit. The continuous process monitoring system must be in continuous operation whenever the Catalytic Oxidation Unit is in operation. The NH<sub>3</sub> concentration downstream of the Catalytic Oxidation Unit will be used to determine the CO and VOC concentrations downstream of the Catalytic Oxidation Unit using correlation factors for CO and VOC that are to be established during the source performance test specified in Special Condition No. F.3 of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

27. Foul Water Treatment Plant Monitoring and Recordkeeping

The permittee shall monitor the Foul Water Treatment Plant effluent water for pH and temperature on a daily basis. The permittee shall also monitor the Foul Water Treatment Plant offgas for H<sub>2</sub>S concentration using colorimetric indicator tubes at least twice per year and when the pH drops below 9. Records shall be kept of the effluent water pH and temperature and of the offgas H<sub>2</sub>S concentration.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

**Section E. Notification and Reporting Requirements.**

1. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **on an annual basis** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due within **sixty (60) days** following the end of each calendar year. The enclosed **Annual Emissions Report Form: Refinery Equipment - Process Rate** or equivalent form, shall be used in reporting fugitive emissions.

Upon written request of the permittee, the deadline for reporting annual emissions may be extended if the Department determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-114)

2. Additional notification and reporting requirements shall be conducted in accordance with the standard conditions found in Attachment I, Standard Conditions 14, 16, 17, and 25, respectively. These notifications shall include, but not be limited to:

- a. Anticipated date of initial start-up, actual date of construction commencement, and actual date of start-up;
- b. Intent to shutdown air pollution control equipment for necessary scheduled maintenance;
- c. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and
- d. Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. The permittee shall report **within five (5) working days** any deviations from permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventative measures taken. Corrective actions may include a requirement for more frequent monitoring, or could trigger implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

4. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department and U.S. EPA Region 9, a compliance certification pursuant to HAR §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall be submitted **within ninety (90) days after** the end of each calendar year, and shall be signed and dated by an authorized representative.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

5. The permittee shall submit for valves, pumps and compressors subject to the requirements of 40 CFR Part 60, Subpart GGG, or 40 CFR Part 63, Subpart CC, **semiannual** reports to the Department beginning six months after the initial start-up date. The reports shall be submitted within **sixty (60) days after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31)**. The **initial** semiannual report shall include the following information:

- a. Process unit identification;
- b. Number of valves subject to the requirements of Special Condition No. D.5 of this Attachment, excluding those valves designated for no detectable emissions under the provisions of Special Condition No. D.5.f of this Attachment;
- c. Number of pumps subject to the requirements of Special Condition No. D.2 of this Attachment, excluding those pumps designated for no detectable emissions under the provisions of Special Condition No. D.2.g of this Attachment and those pumps complying with Special Condition No. D.2.h of this Attachment; and
- d. Number of compressors subject to the requirements of Special Condition No. C.3 of this Attachment, excluding those compressors designated for no detectable emissions under the provisions of Special Condition No. C.3.e of this Attachment and those compressors complying with Special Condition No. C.3.d of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

6. All semiannual reports, required in Special Condition No. E.5 of this Attachment, shall include the following information:

- a. Process unit identification;
- b. For each month during the semiannual reporting period;

- i. Number of valves for which leaks were detected;
- ii. Number of valves for which leaks were not repaired;
- iii. Number of pumps for which leaks were detected;
- iv. Number of pumps for which leaks were not repaired;
- v. Number of compressors for which leaks were detected;
- vi. Number of compressors for which leaks were not repaired; and
- vii. The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

- c. Dates of process unit shutdowns which occurred within the semiannual reporting period; and
- d. Revisions to items reported in the initial semiannual report if changes have occurred since the initial report or subsequent revisions to the initial report.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.592, §63.648)<sup>1</sup>

7. The permittee shall submit to the Department within **sixty (60) days** after initial startup a certification that the equipment necessary to comply with 40 CFR Part 60, Subpart QQQ has been installed and that the required initial inspections or tests of process drains, sewer lines and junction boxes have been carried out in accordance with 40 CFR Part 60, Subpart QQQ. Thereafter, the permittee shall submit **semiannually** a certification that all of the required inspections have been carried out in accordance with 40 CFR Part 60, Subpart QQQ.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.698)<sup>1</sup>

8. A report that summarizes all inspections when a water seal was dry or otherwise breached, when a drain cap or plug was missing or improperly installed, or when cracks, gaps, or other problems were identified that could result in VOC emissions, including information about the repairs or corrective action taken, shall be submitted **initially and semiannually** thereafter to the Department.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.698)<sup>1</sup>

9. If compliance with the provisions of 40 CFR Part 60, Subpart QQQ is delayed pursuant to 40 CFR §60.692-7, the notification required under 40 CFR §60.7(a)(4) shall include the estimated date of the next scheduled refinery or process unit shutdown after the date of notification and the reason why compliance with the standard is technically impossible without a refinery or process unit shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.698)<sup>1</sup>

10. Catalytic Oxidation Unit - Notifications

In accordance with 40 CFR §60.108a(b), the permittee shall notify the Department and U.S. EPA Region 9 of the specific monitoring provisions of 40 CFR §60.107a with which the permittee intends to comply with for an emission limitation in 40 CFR §60.102a.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, 40 CFR §60.108a(b))<sup>1</sup>

11. Catalytic Oxidation Unit - Monitoring Reports

The permittee shall submit **semi-annually** the following written report to the Department for monitoring purposes. The report shall be submitted within **sixty (60) days** *after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31)* and shall include the following:

- a. Any opacity exceedances as determined by the required VE monitoring. Each exceedance reported shall include the date, six (6) minute average opacity reading, possible reason for exceedance, duration of exceedance, and corrective actions taken. If there are no exceedances, the permittee shall submit in writing a statement indicating that for each equipment there were no exceedances for that semi-annual period.

The enclosed **Monitoring Report Form: Opacity Exceedances**, shall be used.

- b. Any deviations from permit requirements shall be clearly identified.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90)

**Section F. Testing Requirements**

1. **Within sixty (60) days after** achieving the maximum production rate of the Catalytic Oxidation Unit, **but not later than one-hundred eighty (180) days after** initial startup of the Catalytic Oxidation Unit, the permittee shall conduct or cause to be conducted performance tests on the offgas from the Foul Water Treatment Plant to determine compliance with the hourly H<sub>2</sub>S limit in Special Condition No. C.9.b of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.8, §60.104a)<sup>1</sup>

2. The performance tests shall be conducted and the results reported in accordance with the test method set forth in 40 CFR Part 60, Appendix A-5 and 40 CFR §60.8. Performance tests for the emissions of H<sub>2</sub>S shall be conducted using EPA Method 11 or U.S. EPA-approved equivalent methods, or alternative methods with prior written approval from the Department.

For Method 11, the sampling time and sample volume must be at least ten (10) minutes and 0.010 dscm (0.35 dscf). Two (2) samples of equal sampling time must be taken at about one-hour (1-hour) intervals. The arithmetic average of these two (2) samples constitutes a run. For most fuel gases, sampling times exceeding twenty (20) minutes may result in depletion of the collection solution, although fuel gases containing low concentrations of H<sub>2</sub>S may necessitate sampling for longer periods of time.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.8, §60.104a(j))<sup>1</sup>

3. **Within sixty (60) days after** achieving the maximum production rate of the Catalytic Oxidation Unit, **but not later than one-hundred eighty (180) days after** initial startup of the Catalytic Oxidation Unit and annually thereafter, the permittee shall conduct or cause to be conducted performance tests for nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOC) on the Catalytic Oxidation Unit outlet stack.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

4. Performance tests for the emissions of NO<sub>x</sub>, CO, and VOC shall be conducted and results reported in accordance with the test methods set forth in 40 CFR Part 60, Appendix A. The following test methods or U.S. EPA-approved equivalent methods, or alternative methods with prior written approval from the Department of Health shall be used:
- Performance tests for the emissions of NO<sub>x</sub> shall be conducted using 40 CFR Part 60 Methods 1-4 and 7.
  - Performance tests for the emissions of CO shall be conducted using 40 CFR Part 60 Methods 1-4 and 10.
  - Performance tests for the emissions of VOC shall be conducted using 40 CFR Part 60 Methods 1-4 and 25A.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

5. Each performance test shall consist of three (3) separate runs using the applicable test method. For the purpose of determining compliance with an applicable regulation, the arithmetic mean of the results from the three (3) runs shall apply.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.8)<sup>1</sup>

6. The permittee shall provide sampling and testing facilities at its own expense. The Department may monitor any of the required performance tests.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

7. Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations are approved by the Department before the tests.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

8. **At least thirty (30) days prior to performing a test**, the permittee shall submit a written *performance test plan* to the Department and the U.S. EPA Region 9 that describes the test date(s), test duration, test locations, test methods, source operation, and other parameters that may affect test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A performance test plan or quality assurance plan that does not have the approval of the Department may be grounds to invalidate any test and require a retest.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.8)<sup>1</sup>

9. **Within sixty (60) days** after completion of the performance test, the permittee shall submit to the Department and the U.S. EPA Region 9, the test report which shall include the analysis of the offgas from the Foul Water Treatment Plant, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data. A similar test report for the performance tests on the Catalytic Oxidation Unit outlet stack shall also be submitted.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.8)<sup>1</sup>

10. Upon written request and justification by the permittee, the Department may waive the requirement for a specific annual performance test. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior tests indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous performance test.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90; 40 CFR §60.8)<sup>1</sup>

#### **Section G. Agency Notifications.**

1. Any document (including reports) required to be submitted by this Covered Source permit shall be in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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<sup>1</sup>The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

<sup>2</sup>The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.<sup>3</sup>This date is to be revised upon issuance of the renewal for CSP No. 0088-01-C.