

PROPOSED

[Amended Date]

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
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07-xxx E CAB
File No. 0212-20/0212-22

Mr. Frank D. Clouse
Vice President, Refinery Operations
Tesoro Hawaii Corporation
91-325 Komohana Street
Kapolei, Hawaii 96707-1713

Dear Mr. Clouse:

**Subject: Amendment of Covered Source Permit (CSP) No. 0212-01-C
Minor Modification Application No. 0212-20
Significant Modification Applications No. 0212-22
Asphalt Heating and Loading
Tesoro Hawaii Corporation
Petroleum Refinery
Located at 91-325 Komohana Street, Kapolei, Oahu
Date of Expiration: [Amended Date + 5 yrs]**

In accordance with Hawaii Administrative Rules, Chapter 11-60.1, and pursuant to your application for a Minor Modification dated March 2, 2005 and Significant Modification dated March 29, 2007, the Department of Health hereby amends Covered Source Permit (CSP) No. 0212-01-C issued to Tesoro Hawaii Corporation. The amendment revises the Asphalt Manufacturing Unit section of the permit by updating the service and NSPS applicability of the equipment in asphalt heating and loading.

The enclosed Attachments II(E), II(J) and II(M) supersedes in its entirety the corresponding Attachments II(E), II(J) and II(M) issued with CSP No. 0212-01-C on July 6, 2000 and amended on October 8, 2001; April 15, 2003; October 13, 2003; and August 4, 2004. All other permit conditions issued with CSP No. 0212-01-C shall not be affected and shall remain valid. Receipts for the application filing fees of \$200.00 and \$1,000.00 are enclosed.

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

Sincerely,

THOMAS E. ARIZUMI, P.E., CHIEF
Environmental Management Division

DL:se
Enclosures
c: CAB Monitoring Section

**ATTACHMENT II(E): SPECIAL CONDITIONS
COVERED SOURCE PERMIT NO. 0212-01-C**

ASPHALT HEATING AND LOADING

[Amended Date]

[Expiration Date]

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 following equipment and associated appurtenances:
 - a. Asphalt Heater, ID no. H801, 33 MMBtu/hr heat input;
 - b. Asphalt Loading Rack.
2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section B. Applicable Federal Regulations

1. The asphalt heater H801 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 J, Standards of Performance for Petroleum Refineries.
 - b. 40 CFR Part 63, National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT),
 - i. Subpart A, General Provisions; and
 - ii. Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial and Institutional Boilers and Process Heaters.

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, §60.100, §63.1, §63.7490)¹

Section C. Operational and Emission Limitations

1. The asphalt heater H801 shall be fired only on refinery fuel gas (RFG) with a hydrogen sulfide (H₂S) content not to exceed 230 mg/dscm (0.10 gr/dscf).

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.104)¹

2. Maximum Emission Limits

The permittee shall not discharge or cause the discharge into the atmosphere emissions of nitrogen oxides, (NO_x as NO₂) in excess of 2.73 lb/hr (3-hour average) and 0.155 lb/MMBtu (3-hour average) for the asphalt heater H801.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

3. Visible Emissions (V.E.)

For any six (6) minute averaging period, the asphalt heater H801 shall not exhibit visible emissions of twenty (20) percent opacity or greater, except as follows: during startup, shutdown, or equipment breakdown, these equipment may exhibit visible emissions greater than twenty (20) percent opacity but not exceeding 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, §11-60.1-161; 40 CFR §60.472)¹

Section D. Monitoring and Recordkeeping Requirements

1. The permittee shall operate and maintain a non-resetting fuel meter on the asphalt heater H801 to record the amount of refinery fuel gas fired in the heater. Records shall be maintained on a monthly and annual basis.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

2. Continuous Emissions Monitoring System (CEMS)

- a. The permittee shall operate and maintain a continuous emissions monitoring system (CEMS) for continuously monitoring and recording the concentration (dry basis) of H₂S in the RFG before being burned in the asphalt heater H801.

- b. The CEMS shall meet the following requirements:

- i. The span value for the CEMS is 425 mg/dscm (300 ppmv) H₂S.

- ii. All fuel gas combustion devices, including heater H801, having a common source of fuel gas may be monitored at one location, if monitoring at this location accurately represents the concentration of H₂S in the RFG being burned.

- iii. Performance evaluations for the H₂S CEMS shall be in accordance with 40 CFR §60.13. The H₂S CEMS shall meet 40 CFR Part 60, Appendix B, Performance Specification 7, Specifications and Test Procedures for Hydrogen Sulfide Continuous Emissions Monitoring Systems in Stationary Sources; and Appendix F, Quality Assurance Procedures. 40 CFR Part 60, Appendix A, Method 11 shall be used in conducting any relative accuracy test audit (RATA).
- iv. Cylinder Gas Audits (CGA) shall be conducted on a quarterly basis in accordance with 40 CFR Part 60, Appendix F, Section 5.1.2. Since performance specification test procedures are only intended for the initial test of the H₂S CEMS, RATAs need not be performed on an annual basis, unless requested by the Department of Health; or there is a significant change or performance deficiency of the CEMS.
- v. Calibration Drift (CD) assessments shall be performed on a daily basis pursuant to 40 CFR Part 60, Appendix F, Section 4.1.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.105)¹

3. Visible Emissions (V.E.)

- a. The permittee shall conduct **monthly** (*calendar month*) V.E. observations for the asphalt heater H801 in accordance with 40 CFR Part 60, Appendix A, Method 9 or by use of a Ringelmann's chart as provided. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for the asphalt heater H801 by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- c. Upon written request and justification, the Department of Health may waive the requirements for the **annual** V.E. observations. 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 **annual** V.E. observations. The annual V.E. observations shall not be waived for more than two consecutive years.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-32, §11-60.1-90; SIP §11-60-15, §11-60-24)²

4. The permittee shall maintain a file of all measurements and monitoring data, including the continuous monitoring system performance evaluations; continuous monitoring system calibration checks; adjustments and maintenance performed on the monitoring system or

devices; and all other information required to be recorded by 40 CFR §60.13 in a permanent form suitable for inspection.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.7) ¹

5. All records, including supporting information, shall be maintained at the facility for at least five (5) years from the date of the monitoring sample, 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 true, accurate and maintained in a permanent form suitable for inspection and made available to the Department of Health or their representatives upon request.

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

Section E. Notification and Reporting Requirements

1. Excess Emissions

- a. The permittee shall submit an excess emissions and monitoring systems performance report pursuant to 40 CFR §60.7(c) to the Department of Health for **every semi-annual calendar period**. The report shall include the following:
 - i. The magnitude of excess emissions computed in accordance with 40 CFR §60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions;
 - ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the asphalt heater H801. The nature and cause of any malfunction (if known), and the corrective action taken or preventive measures adopted, shall also be reported;
 - iii. The date and time identifying each period during which the continuous emissions monitoring system was inoperative except for zero and span checks. The nature of each system repair or adjustment shall be described; and
 - iv. The report shall so state if no excess emissions have occurred. Also, the report shall so state if the continuous emissions monitoring system operated properly during the period and was not subject to any repairs or adjustments except zero and span checks.
- b. All reports shall be postmarked by the **30th day following the end of each semi-annual calendar period**. The enclosed **Excess Emissions and Monitoring System Performance Summary Report** form or an equivalent form shall also be submitted in addition to the excess emissions and monitoring systems performance report.
- c. Excess emissions shall be defined as any rolling 3-hour period during which the average concentration of H₂S in RFG, as measured by the continuous emissions monitoring system, exceeds 230 mg/dscm (0.10 gr/dscf).

- d. Excess emissions indicated by the continuous emissions monitoring system shall be considered violations of the applicable emission and concentration limits for the purposes of the permit.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.7, §60.105)¹

2. The permittee shall submit **semi-annually** written reports to the Department of Health for monitoring purposes. 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)** and shall include the following:
 - a. Any opacity exceedances as determined by the required V.E. 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 were 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: Visible Emissions** or an equivalent form 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, SIP §11-60-24)²

3. 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 - Fuel Consumption** or an equivalent form, shall be used in reporting fuel usage. Upon written request of the permittee, the deadline for reporting annual emissions may be extended if the Department of Health determined 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)

4. Additional notification and reporting requirements shall be conducted in accordance with the standard conditions found in Attachment I, Standard Conditions 16, 17 and 25, respectively. These notifications shall include, but not be limited to:
 - a. Intent to shutdown air pollution control equipment for necessary scheduled maintenance;

- b. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and
- c. 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)

- 5. The permittee shall report in writing **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 requirements 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)

6. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, the attached **Compliance Certification Form**, 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 a responsible official. The compliance certification shall include at a minimum the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114 (a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health including information to determine compliance.

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

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

7. **At least thirty (30) calendar days prior** to the following events, the permittee shall notify the Department of Health in writing of :
 - a. Conducting a performance specification test on the CEMS. The testing date shall be in accordance with the performance test date identified in 40 CFR §60.13.
 - b. Conducting a source performance test as required by this Attachment, Section F, Testing Requirements.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161)

Section F. Testing Requirements

1. The permittee shall conduct or cause to be conducted performance tests on the asphalt heater H801. Performance tests shall be conducted for nitrogen oxides (NO_x as NO₂). All performance tests shall be conducted at the maximum expected operating capacity of the source being tested, or at other operating loads as may be specified by the Department of Health. Performance tests shall be conducted on an annual basis or at such times as may be specified by the Department of Health.

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

2. Performance tests for the emissions of nitrogen oxides (NO_x as NO₂) shall be conducted using EPA Method 1 to 4 and 7, or EPA-approved equivalent methods with prior written approval from the Department of Health.

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

3. For each run, the refinery gas feed rate in dry standard cubic feet per hour (dscf/hr) shall be provided. The permittee shall document the methodology by which each refinery gas feed rate was determined. The refinery gas shall be sampled and analyzed for the heating value per dscf on the day of the test.

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

4. The 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. For Method 7, each run shall consist of four (4) separate samples collected at approximately 15 minute intervals.

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

5. The permittee shall provide sampling and testing facilities at its own expense. The tests shall be conducted at the operating capacities identified in Special Condition No. F.1. of this Attachment, and the Department of Health may monitor the tests.

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

6. **At least thirty (30) calendar days prior to performing a test**, the permittee shall submit a written *performance test plan* to the Department of Health and U.S. EPA Region 9 that describes the 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 test plan or quality assurance plan that does not have the approval of the Department of Health 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)

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

(Auth.: HAR §11-60.1-11, §11-60.1-90)

8. **Within sixty (60) days after completion of the performance test**, the permittee shall submit to the Department of Health and U.S. EPA Region 9 (Attention: AIR-3), the test report which shall include the operating conditions of the vacuum unit charge heater at the time of the test, the analysis of the fuel, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

9. Upon written request and justification, the Department of Health may waive the requirement for a specific annual source 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 source test. The source performance test for nitrogen oxides shall not be waived for more than two consecutive years.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

10. Upon the Department of Health's request, or if a significant change or performance deficiency occurs with the CEMS, performance tests for the H₂S levels in the RFG shall be conducted and results reported in accordance with the instructions and test methods set forth in 40 CFR §60.106, and Appendix A, Method 11.

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

Section G. Agency Notification

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)

¹The 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.

²The 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.

**ATTACHMENT II(J): SPECIAL CONDITIONS
COVERED SOURCE PERMIT NO. 0212-01-C**

WASTEWATER TREATMENT UNIT

[Amended Date]

[Expiration Date]

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 following equipment and associated appurtenances of the Wastewater Treatment Unit (WTU):
 - a. Oil-Water Separator System
 - i. Gross oil water separator with fixed roof *
 - ii. API gravity separator with fixed roof *
 - iii. API effluent tank with fixed roof *
 - iv. Induced air floatation (IAF) unit with fixed roof *
 - b. Recovered Oil System
 - i. Oil skimming tank with fixed roof *
 - ii. IAF float thickener with fixed roof *
 - iii. Two emulsion breaking tanks with fixed roof *
 - iv. Two air strippers *
 - c. Oily Sludge Dewatering System
 - i. Oily sludge tank with fixed roof *
 - ii. Oily sludge conditioning tank with fixed roof *
 - iii. Oily sludge filter press
 - d. Air Pollution Control Equipment
 - i. Thermal Oxidizer - 6.5 MMBtu/hr heat input or 3.0 MMBtu/hr heat input
 - e. Activated Sludge System
 - i. Splitter box
 - ii. Two aeration tanks
 - iii. Two biosystem clarifier tanks
 - iv. Clarifier effluent tank
 - v. WTU effluent tank
 - vi. Biosludge thickener tank
 - vii. Aerobic digester tank

- f. Biosludge Dewatering System
 - i. Biosludge storage tank
 - ii. Biosludge conditioning tank
 - iii. Biosludge filter press
- g. Demineralizer Wastewater Treatment
 - i. Demineralizer Waste Clarifier
- h. Wastewater Storage and Collection System
 - i. Three WTU process/stormwater sumps *
 - ii. One (1) 474,024 gallon (nominal) vertical fixed roof storage tank no. 517
 - iii. One (1) - 302,234 gallon (nominal) external floating roof storage tank identified as Wastewater Equalization Tank 3520
 - iv. One (1) - 616,805 gallon (nominal) external floating roof storage tank identified as Wastewater Equalization Tank 3526

***Indicates equipment whose emissions are vented through the thermal oxidizer.**

(Auth.: HAR §11-60.1-3)

- 2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section B. Applicable Federal Regulations

- 1. The Wastewater Treatment Unit (WTU) is subject to the provisions of the following federal regulations:
 - a. 40 CFR Part 60, Standards of Performance of New Stationary Sources (NSPS)
 - i. Subpart A, General Provisions; and
 - ii. Subpart QQQ, Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems.
 - b. 40 CFR Part 61, National Emission Standards for Hazardous Air Pollutants (NESHAPS)
 - i. Subpart A, General Provisions; and
 - ii. Subpart FF, National Emission Standard for Benzene Waste Operations

- c. 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, §11-60.1-161, §11-60.1-174, §11-60.1-180; 40 CFR §60.1, §60.690, §61.01, §61.340, §63.1, §63.640)¹

2. The Thermal Oxidizer is subject to the provisions of the following federal regulations:
 - a. 40 CFR Part 60, Standards of Performance of New Stationary Sources (NSPS)
 - i. Subpart A, General Provisions; and
 - ii. Subpart J, Standards of Performance for 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, §60.100)¹

Section C. Operational and Emission Limitations

1. The wastewater processed by the WTU shall not exceed 233 million gallons per year in any rolling 365 day period as measured at the collective inlet of the gross oil water separator Z3511.

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

2. The following conditions pertain to the oil-water separator system:
 - a. All equipment with a fixed roof equipped with access doors or openings shall be gasketed, latched, and kept closed at all times during operation of the WTU, except during inspection and maintenance.
 - b. Any pressure relief valve shall be set at the maximum pressure necessary for proper system operation, but such that the valve will not vent continuously.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.692-3)¹

3. The following conditions pertain to the thermal oxidizer:
 - a. The thermal oxidizer shall be operated to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.
 - b. The thermal oxidizer shall provide a minimum efficiency of 98% destruction of all VOC emissions directed to it.
 - c. The thermal oxidizer shall be fired only on refinery fuel gas (RFG) as a supplementary fuel to the VOC stream. The hydrogen sulfide (H₂S) content of the RFG shall not exceed 230 mg/dscm (0.10 gr/dscf).

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.104, §60.692-5)¹
4. Except during maintenance of the thermal oxidizer, or during periods when the thermal oxidizer malfunctions, all volatile organic compound (VOC) emissions from the gross oil water separator, API gravity separator, API effluent tank, IAF unit, air strippers, oil skimming tank, IAF float thickener, emulsion breaking tanks, oil sludge tank, oil sludge conditioning tank, and three WTU process/stormwater sumps shall be exhausted through the thermal oxidizer at all times wastewater is being process through the WTU. During scheduled maintenance of the thermal oxidizer, the air strippers shall be shut down and all VOC emissions from the closed vent system shall be redirected to a portable air pollution control device. During periods of thermal oxidizer malfunctions, the VOC emissions from the closed vent system shall be redirected immediately to a portable air pollution control device. If the system cannot be restarted within thirty (30) minutes, the air strippers shall be shut down. The portable air pollution device shall maintain a minimum VOC removal efficiency of 95%.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)
5. The closed vent system of the WTU facility shall be operated with no detectable VOC emissions, measuring less than 500 ppm above background. The closed vent system encompasses the portion of the WTU facility that is not open to the atmosphere. It includes the gross oil water separator, API gravity separator, oil skimming tank, IAF unit, air strippers, and the associated piping, connections, and flow inducing devices that transport gas or vapor from the emission sources to the thermal oxidizer.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.692-5)¹
6. A pressure indicator shall be operated and maintained at the outlet vent stream of the gross oil water separator, API gravity separator, oil skimming tank, IAF unit, and each air stripper to ensure that the VOC vapors are being routed to the thermal oxidizer. The pressure indicator shall be in the vent stream at the nearest feasible point to the control device inlet, but before being combined with other vent streams.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.692-5)¹
7. The normal operating pressure for each pressure indicator associated with the gross oil water separator, API gravity separator, oil skimming tank, IAF unit, and the two air

strippers which all exhaust to the thermal oxidizer shall be maintained in order to facilitate detection of abnormal flow of the VOC vapors.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

8. All gauging and sampling devices for the closed vent system shall be gas-tight, except when gauging or sampling is taking place.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.692-5)¹

9. When emissions from the closed vent system are detected, first effort to initiate repair in eliminating emissions shall be made as soon as practical, but not later than **thirty (30) calendar days** from the date emissions are detected, unless the permittee can demonstrate in writing to the Department of Health that repair is technically impossible without a complete or partial refinery or WTU shutdown. Repair of the necessary equipment shall be made before the end of the next refinery or WTU shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.692-5)¹

10. Visible Emissions (V.E.)

For any six (6) minute averaging period, the thermal oxidizer shall not exhibit visible emissions of twenty (20) percent opacity or greater, except as follows: during startup, shutdown, or equipment breakdown, the thermal oxidizer may exhibit visible emissions greater than twenty (20) percent opacity but not exceeding 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. If annual test results required under NESHAPS, Subpart FF for benzene concentration of the refinery wastewater exceed 10 megagrams per year (Mg/yr), all applicable requirements of Subpart FF, including the provisions for air controls, monitoring, and reporting shall be required for the refinery's wastewater process system.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-173; 40 CFR §61.342)¹

12. The Department of Health reserves the right to require installation of odor controls, or more stringent air controls if during operation, unanticipated odors which present a nuisance are present, or higher levels of VOC's are emitted due to increased concentration of VOC in the waste stream or nonperforming air controls.

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

Section D. Monitoring and Recordkeeping Requirements

1. A continuous flow meter shall be operated and maintained at the inlet of the gross oil water separator to measure and record the gallons per year in any rolling 365-day period the wastewater processed.

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

2. The following conditions pertain to the oil-water separator system:
 - a. Roof seals, access doors, and other openings shall be checked by visual inspection semi-annually to ensure that no cracks or gaps occur between the roof and tank wall, and that access doors and other openings are closed and gasketed properly.
 - b. When a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as possible, but not later than **fifteen (15) calendar days** after it is identified, except if the permittee can demonstrate in writing to the Department of Health that repair is technically impossible without a complete or partial refinery or WTU shutdown. Repair of the necessary equipment shall be made before the end of the next refinery or WTU shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.692-3)¹

3. The following conditions pertain to the thermal oxidizer:
 - a. A temperature monitoring device equipped with a continuous recorder shall be operated and maintained to measure and record the temperature of the gas stream in the combustion zone of the thermal oxidizer. The temperature monitoring device shall have an accuracy of one (1) percent of the temperature being measured in °C or ± 0.5 °C (± 1.0 °F), whichever is greater.
 - b. The permittee shall operate and maintain a continuous emission monitoring system (CEMS) for continuously monitoring and recording the concentration (dry basis) of H₂S in the RFG before being burned in the thermal oxidizer.
 - i. The CEMS shall meet the following requirements:
 - (1) The span value for the CEMS is 425 mg/dscm (300 ppmv) H₂S.
 - (2) All fuel gas combustion devices, including the thermal oxidizer, having a common source of fuel gas may be monitored at one location, if monitoring at this location accurately represents the concentration of H₂S in the RFG being burned.
 - (3) Performance evaluations for the H₂S CEMS shall be in accordance with 40 CFR §60.13. The H₂S CEMS shall meet 40 CFR Part 60, Appendix B, Performance Specification 7, Specifications and Test Procedures for Hydrogen Sulfide

Continuous Emissions Monitoring Systems in Stationary Sources; and Appendix F, Quality Assurance Procedures. 40 CFR Part 60, Appendix A, Method 11 shall be used in conducting any relative accuracy test audit (RATA).

- (4) Cylinder Gas Audits (CGA) shall be conducted on a quarterly basis in accordance with 40 CFR Part 60, Appendix F, Section 5.1.2. Since performance specification test procedures are only intended for the initial test of the H₂S CEMS, RATAs need not be performed on an annual basis, unless requested by the Department of Health; or there is a significant change or performance deficiency of the CEMS.
 - (5) Calibration Drift (CD) assessments shall be performed on a daily basis pursuant to 40 CFR Part 60, Appendix F, Section 4.1.
- c. The permittee shall operate and maintain a fuel meter to monitor the standard cubic feet (SCF) of RFG fired by the thermal oxidizer.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.105, §60.695)¹

4. Visible Emissions (V.E.)

- a. The permittee shall conduct **monthly** (*calendar month*) V.E. observations for each equipment subject to opacity limitations in accordance with 40 CFR Part 60, Appendix A, Method 9 or by use of a Ringelmann's chart as provided. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for each equipment subject to opacity limits by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the *Visible Emissions Form Requirements*.
- c. Upon written request and justification, the Department of Health may waive the requirements for the **annual** V.E. observations. 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 **annual** V.E. observations. The annual V.E. observations shall not be waived for more than two consecutive years.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-32, §11-60.1-90, SIP §11-60-15, §11-60-24)²

5. The permittee shall maintain a file containing records of the following:
 - a. The location, date, and corrective action of the required inspections for the oil-water separator system. Include documentation of any problems identified that could result in VOC emissions.
 - b. The location, date, and corrective action of the required inspections for the closed vent system. Include dates of each measurement of detectable emissions and the corresponding background levels of VOC measured during each detectable emissions. The maximum instrument reading measured during each detectable emission measurement shall also be recorded. Include documentation of any problems identified that could result in detectable VOC emissions.
 - c. Reasons for delays for any repair or correction of an emission point by the specified time, with the expected and actual date of repair completion. The documentation shall be signed by a responsible official (or designee) who determined that the repair could not be done without a refinery or WTU shutdown.
 - d. Dates of startup and shutdown of the closed vent system and thermal oxidizer, and periods where the system is not operated as designed. Document any problems with the flow of VOC's to the thermal oxidizer as determined by the pressure indicators installed in each vent stream to the thermal oxidizer.
 - e. Maintain continuous records of the temperature of the gas stream in the combustion zone of the thermal oxidizer, and record all 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone is more than 28 °C (50 °F) below the required combustion zone temperature.
 - f. Record the concentration of hydrogen sulfide in the RFG, as measured by the continuous monitoring system. The data shall be summarized as an average 1-hour H₂S concentration on a daily, monthly, and annual basis.
 - g. The SCF of RFG fired in the thermal oxidizer each month.
 - h. Test results of benzene concentrations in the wastestreams as required by NESHAPS, Subpart FF.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161, §11-60.1-173; 40 CFR §60.107, §60.697, §61.356)¹
6. A copy of the design specifications and drawings for all equipment in the WTU used to comply with the conditions of this permit shall be kept for the life of the WTU in a readily accessible location. The design specifications include:
 - a. Detailed schematics, and piping and instrumentation diagrams;
 - b. Dates and description of any changes in the design specifications;

- c. Operating and maintenance information on the closed vent system, thermal oxidizer, and the portable air pollution control devices; and
- d. Documentation that the thermal oxidizer and the closed vent system will achieve the required control efficiency of 98% VOC destruction during the maximum loading conditions, and is capable of achieving a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C (1500 °F). The documentation shall include a general description of the gas streams that enter the thermal oxidizer, including flow and VOC content under varying wastewater level conditions (dynamic and static) and the manufacturer's design specifications for the thermal oxidizer. Include parameter(s) to be monitored which ensures that the thermal oxidizer and closed vent system are operated in conformance with the permit requirements and design specifications. Provide an explanation of the criteria used for selecting the parameters.
- e. Documentation that the portable air pollution control device used during scheduled maintenance can achieve a minimum VOC removal of 95%.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.697)¹

7. The permittee shall maintain a file of all measurements and monitoring data, including the continuous monitoring system performance evaluations; continuous monitoring system calibration checks; adjustments and maintenance performed on the monitoring systems or devices; and all other information required to be recorded by 40 CFR §60.13 in a permanent form suitable for inspection.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.7)¹

8. 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 true, accurate and maintained in a permanent form suitable for inspection and made available to the Department of Health or their representatives upon request.

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

Section E. Notification and Reporting Requirements

1. Excess Emissions

- a. The permittee shall submit an excess emissions and monitoring systems performance report pursuant to 40 CFR §60.7(c) to the Department of Health for **every semi-annual calendar period**. The report shall include the following:
 - i. The magnitude of excess emissions computed in accordance with 40 CFR §60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions;

- ii. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the thermal oxidizer. The nature and cause of any malfunction (if known), and the corrective action taken or preventive measures adopted, shall also be reported;
- iii. The date and time identifying each period during which the continuous emissions monitoring system was inoperative except for zero and span checks. The nature of each system repair or adjustment shall be described; and
- iv. The report shall so state if no excess emissions have occurred. Also, the report shall so state if the continuous emissions monitoring system operated properly during the period and was not subject to any repairs or adjustments except zero and span checks.

- b. All reports shall be postmarked by the **30th day following the end of each semi-annual calendar period**. The enclosed **Excess Emissions and Monitoring System Performance Summary Report** form or an equivalent form shall also be submitted in addition to the excess emissions and monitoring systems performance report.
- c. Excess emissions shall be defined as any rolling 3-hour period during which the average concentration of H₂S in RFG, as measured by the continuous emission monitoring system, exceeds 230 mg/dscm (0.10 gr/dscf).
- d. Excess emissions indicated by the continuous emissions monitoring system shall be considered violations of the applicable emission and concentration limits for the purposes of the permit.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.7, §60.105)¹

- 2. The permittee shall submit **semi-annually** written reports to the Department of Health for monitoring purposes. 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)** and shall include the following:
 - a. For the WTU:
 - i. The gallons of wastewater processed for the semi-annual period and all exceedances measured greater than 233 million gallons per year on a rolling 365-day period as measured by the continuous flow meter.
 - ii. A certification that all required inspections for the oil-water separator system and closed vent system have been performed as required, and the summary of results for these inspections.

- b. For the thermal oxidizer:
 - i. All 3-hour periods of operation during which the average temperature of the gas stream in the combustion zone of the thermal oxidizer as measured by the temperature monitoring device, is more than 28 °C (50 °F) below the required combustion zone temperature.
 - ii. Amount of RFG fired in the thermal oxidizer on a monthly and semi-annual basis.
- c. For the closed vent system:
 - i. All instrument readings 500 ppm above background as measured pursuant to Special Condition No. C.5. of this Attachment.
- d. Any opacity exceedances as determined by the required V.E. 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 were 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: Visible Emissions** or an equivalent form shall be used.

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

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90, §11-60.1-161; 40 CFR 60.698, SIP §11-60-24)²

3. 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 an equivalent form, shall be used in reporting wastewater process rate.

Upon written request of the permittee, the deadline for reporting annual emissions may be extended if the Department of Health determined 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)

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

- a. Intent to shutdown air pollution control equipment for necessary scheduled maintenance;
- b. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and
- c. 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)

5. The permittee shall report in writing **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 requirements 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)

6. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, the attached **Compliance Certification Form**, 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 a responsible official. The compliance certification shall include at a minimum the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114 (a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health including information to determine compliance.

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

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

7. The permittee shall notify the Department of Health in writing at least **thirty (30) calendar days** prior to conducting a performance specification test on the CEMS. The testing date shall be in accordance with the performance test date identified in 40 CFR §60.13.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161)

8. If compliance with any provisions of this permit is delayed to initiate corrective actions, the notification required under 40 CFR §60.7(a)(4) shall include the estimated date of the next scheduled refinery or WTU shutdown after the date of notification and the reason why compliance with the standards is technically impossible without a refinery or WTU shutdown.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-161; 40 CFR §60.698)¹

9. The permittee shall submit the test results of total benzene quantity in the wastestreams pursuant to NESHAPS, Subpart FF, on an annual basis and whenever there is a change in the process generating the wastestream that could cause the total annual benzene quantity from the refinery waste to increase to 10 Mg/yr or more.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-173; 40 CFR §61.357)¹

Section F. Testing Requirements

1. Upon the Department of Health's request, or if a significant change or performance deficiency occurs with the CEMS, performance tests for the H₂S levels in the RFG shall be conducted and results reported in accordance with the instructions and test methods set forth in 40 CFR §60.106, and Appendix A, Method 11.

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

2. At least **thirty (30) calendar days** prior to performing a test, the permittee shall submit a written performance test plan to the Department of Health that describes the 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 test plan or quality assurance plan that does not have the approval of the Department of Health may be grounds to invalidate any test or require a retest.

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

3. The permittee shall provide required testing at its own expense. The Department of Health may monitor the tests.

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

4. Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations receive written approval by the Department of Health before the tests.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

5. Inspection and measurement of emissions concentrations for the closed vent system shall be made on a **semi-annual basis**, in accordance with 40 CFR §60.696 and 40 CFR, Appendix A, Method 21. The instrument used for emission measurements shall be calibrated before each use. The calibration gases shall be zero air (less than 10 ppm of hydrocarbon in air), and a mixture of either methane or n-hexane and air at a concentration of approximately, but less than 10,000 ppm methane or n-hexane.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.696)¹

Section G. Agency Notification

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)

¹The 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.

²The 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.

**ATTACHMENT II(M): SPECIAL CONDITIONS
COVERED SOURCE PERMIT NO. 0212-0-C**

PETROLEUM STORAGE TANKS

[Amended Date]

[Expiration Date]

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 following equipment and associated appurtenances:
 - a. Seven (7) Crude Oil Storage Tanks
 - i. One (1) - 9,868,877 gallon (nominal) external floating roof storage tank identified as Tank 101;
 - ii. Five (5) - 13,989,087 gallon (nominal) external floating roof storage tanks identified as Tanks 102, 103, 104, 105 and 106;
 - iii. One (1) - 18,298,590 gallon (nominal) external floating roof storage tank identified as Tank 107.
 - b. Seven (7) Recovered Oil/Wastewater Storage Tanks
 - i. Two (2) - 1,107,535 gallon (nominal) internal floating roof storage tanks identified as Tanks 109 and 110;
 - ii. One (1) - 2,650,792 gallon (nominal) internal floating roof storage tank identified as Tank 111;
 - iii. One (1) - 2,283,940 gallon (nominal) external floating roof storage tank identified as Tank 902;
 - iv. One (1) - 302,234 gallon (nominal) external floating roof storage tank identified as Wastewater Equalization Tank 3520;
 - v. One (1) - 509,305 gallon (nominal) external floating roof storage tank identified as Recovered Oil Tank 3522;
 - vi. One (1) - 616,805 gallon (nominal) external floating roof storage tank identified as Wastewater Equalization Tank 3526.
 - c. Fifteen (15) Naphtha/Gasoline Storage Tanks
 - i. Four (4) - 1,015,085 gallon (nominal) external floating roof storage tanks identified as Tanks 201, 202, 203 and 204;
 - ii. Two (2) - 3,289,626 gallon (nominal) external floating roof storage tanks identified as Tanks 405 and 509;
 - iii. One (1) - 2,134,215 gallon (nominal) external floating roof storage tank identified as Tank 406;
 - iv. Two (2) - 2,283,940 gallon (nominal) internal floating roof storage tanks identified as Tanks 407 and 408;
 - v. Two (2) - 1,998,448 gallon (nominal) external floating roof storage tanks identified as Tanks 501 and 502;

- vi. One (1) -5,296,298 gallon (nominal) internal floating roof storage tank identified as Tank 510;
 - vii. One (1) - 4,605,476 gallon (nominal) internal floating roof storage tank identified as Tank 605;
 - viii. Two (2) - 3,095,209 gallon (nominal) internal floating roof storage tanks identified as Tanks 610 and 611.
- d. Forty One (41) Heavy Oil Storage Tanks
- i. One (1) - 2,650,792 gallon (nominal) vertical fixed roof storage tank identified as Tank 112;
 - ii. One (1) - 68,159 gallon (nominal) vertical fixed roof storage tank identified as Tank 200;
 - iii. Four (4) - 1,015,085 gallon (nominal) vertical fixed roof storage tanks identified as Tanks 205, 206, 301 and 302;
 - iv. Two (2) - 1,804,595 gallon (nominal) vertical fixed roof storage tanks identified as Tanks 207 and 303;
 - v. Two (2) - 2,141,194 gallon (nominal) vertical fixed roof storage tanks identified as Tanks 304 and 305;
 - vi. Five (5) - 4,605,476 gallon (nominal) vertical fixed roof storage tanks identified as Tanks 306, 307, 603, 606 and 607;
 - vii. One (1) - 455,942 gallon (nominal) vertical fixed roof storage tank identified as Tank 311;
 - viii. Two (2) - 1,804,595 gallon (nominal) external floating roof storage tanks identified as Tanks 401 and 402;
 - ix. Two (2) - 1,804,595 gallon (nominal) external floating roof storage tanks identified as Tanks 403 and 404;
 - x. Two (2) - 1,998,448 gallon (nominal) external floating roof storage tanks identified as Tanks 503 and 504;
 - xi. Four (4) - 1,998,448 gallon (nominal) vertical fixed roof storage tanks identified as Tanks 505, 506, 507 and 508;
 - xii. One (1) - 5,526,571 gallon (nominal) internal floating roof storage tank identified as Tank 511;
 - xiii. One (1) - 5,168,496 gallon (nominal) vertical fixed roof storage tank identified as Tank 512;
 - xiv. One (1) - 1,265,848 gallon (nominal) vertical fixed roof storage tank identified as Tank 513;
 - xv. Two (2) - 2,968,887 gallon (nominal) vertical fixed roof storage tank identified as Tanks 514 and 515;
 - xvi. One (1) - 8,518 gallon (nominal) vertical fixed roof storage tank identified as Tank 516;
 - xvii. Two (2) - 2,141,194 gallon (nominal) internal floating roof storage tanks identified as Tanks 601 and 602;
 - xviii. One (1) - 4,605,476 gallon (nominal) internal floating roof storage tank identified as Tank 604;
 - xix. Two (2) - 4,856,228 gallon (nominal) internal floating roof storage tanks identified as Tanks 608 and 609;
 - xx. Two (2) - 22,557 gallon (nominal) vertical fixed roof storage tanks identified as Tanks 903 and 905;

- xxi. One (1) - 117,487 gallon (nominal) vertical fixed roof storage tank identified as Tank 1103;
- xxii. One (1) - 230,274 gallon (nominal) internal floating roof storage tank identified as Tank 2301.

(Auth.: HAR §11-60.1-3)

- 2. The permittee shall permanently attach an identification tag or nameplate on each tank. The identification tag or nameplate shall be attached to the tank in a conspicuous location. Information shall also be made available upon request that identifies the capacity, date of construction, serial number or I.D. and manufacturer of each tank.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

Section B. Applicable Federal Regulations

- 1. Petroleum storage tanks 106, 406, 510, 407, 408 and 605 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 K, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978.

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, §60.110)¹

- 2. Petroleum storage tank 902 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 Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984.

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, §60.110a)¹

3. Petroleum storage tanks 107, 109, 110, 111, 610, 611, 3520, 3522 and 3526 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 Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.

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, §60.110b)¹

4. Each of the storage tanks identified in Section A of this Attachment 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.

Compliance Date

For Group 1 storage tanks (petroleum storage tanks 101, 102, 103, 104, 105, 106, 107, 109, 110, 111, 201, 202, 203, 204, 405, 406, 407, 408, 501, 502, 509, 510, 605, 610, 611, 902, 3520, 3522 and 3526), the permittee shall comply with all applicable requirements of these standards, including all emission limits, notification, reporting, monitoring, testing and recordkeeping requirements, at the first tank degassing and cleaning activity after August 18, 1998, or before August 18, 2005, whichever comes first; except for tank 109, which shall already be in compliance with these standards.

The major requirements of these standards are detailed in **Section G - 40 CFR Part 63, Subpart CC Requirements** of this Attachment. Group 1 storage tanks shall comply with Sections C through G below. Group 2 storage tanks (petroleum storage tanks 112, 200, 205, 206, 207, 301, 302, 303, 304, 305, 306, 307, 311, 401, 402, 403, 404, 503, 504, 505, 506, 507, 508, 511, 512, 513, 514, 515, 516, 601, 602, 603, 604, 606, 607, 608, 609, 903, 905, 1103 and 2301) shall comply with Sections C through F below.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174, 40 CFR §63.1, §63.640, §63.646)¹

Section C. Operational and Emission Limitations

1. The petroleum storage tanks identified in Special Condition No. A.1.a. of this Attachment shall only store petroleum liquids with a true vapor pressure of 11.1 psia or less.

(Auth.: HAR §11-60.1-3, §11-60.1-39, §11-60.1-90)

2. The petroleum storage tanks identified in Special Condition No. A.1.b. of this Attachment shall only store petroleum liquids with a true vapor pressure of 11.1 psia or less.

(Auth.: HAR §11-60.1-3, §11-60.1-39, §11-60.1-90)

3. The petroleum storage tanks identified in Special Condition No. A.1.c. of this Attachment shall only store petroleum liquids with a true vapor pressure of 11.1 psia or less.

(Auth.: HAR §11-60.1-3, §11-60.1-39, §11-60.1-90)

4. The petroleum storage tanks identified in Special Condition No. A.1.d. of this Attachment (except for petroleum storage tanks 903 and 905) shall only store petroleum liquids with a true vapor pressure of 1.5 psia or less.

(Auth.: HAR §11-60.1-3, §11-60.1-39, §11-60.1-90)

5. Petroleum Storage Tanks 106, 406, 510, 407, 408 and 605

- a. The true vapor pressure of the petroleum liquid stored shall be maintained below 11.1 psia (76.6 kPa) at all times. Determination of the true vapor pressure shall be done according to an applicable method specified in NSPS, Subpart K.

- b. The petroleum storage tanks shall be equipped with a floating roof which will rest on the surface of the liquid contents and be equipped with a closure seal or closure seals to close the space between the roof edge and the tank wall.

(Auth.: HAR §11-60.1-3, §11-60.1-39, §11-60.1-90, §11-60.1-161, 40 CFR §60.112)¹

6. Petroleum storage tank 902

- a. The true vapor pressure of the petroleum liquid stored shall be maintained below 11.1 psia (76.6 kPa) at all times. Determination of the true vapor pressure shall be done according to an applicable method specified in NSPS, Subpart Ka.

- b. The petroleum storage tank shall be equipped with an external floating roof which will rest on the surface of the liquid contents and be equipped with a primary seal and secondary seal to close the space between the roof edge and the tank wall. The roof is to be floating on the liquid at all times (i.e., off the roof leg supports), except during initial fill and when the tank is completely emptied and subsequently refilled. The process of emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. The tank shall meet the following specifications:

- i. The primary seal is to be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. Each seal is to meet the following requirements:
 - (1) The accumulated area of gaps between the tank wall and the metallic shoe seal or the liquid-mounted seal shall not exceed 212 cm² per meter of tank diameter (10.0 in² per ft. of tank diameter) and the width of any portion of any gap shall not exceed 3.81 cm (1.5 in).
 - (2) The accumulated area of gaps between the tank wall and the vapor-mounted seal shall not exceed 21.2 cm² per meter of tank diameter (1.0 in² per ft. of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (0.5 in).
 - (3) One end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 61 cm (24 in) above the stored liquid surface.
 - (4) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
- ii. The secondary seal is to meet the following requirements:
 - (1) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall, except as provided in Special Condition No. C.6.b.ii.(2) of this Attachment.
 - (2) The accumulated area of gaps between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed 21.2 cm² per meter of tank diameter (1.0 in² per ft of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (0.5 in). There shall be no gaps between the tank wall and the secondary seal used in combination with a vapor-mounted primary seal.
 - (3) There are to be no holes, tears or other openings in the seal or seal fabric.
 - (4) The permittee is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal.
- iii. Each opening in the roof except for automatic bleeder vents and rim space vents is to provide a projection below the liquid surface. Each opening in the roof except for automatic bleeder vents, rim space vents and leg sleeves is to be equipped with a cover, seal or lid which is to be maintained in a closed position at all times (i.e., no visible gap), except when the device is in actual use or as described in Special Condition No. C.6.b.iv. of this Attachment. Automatic bleeder vents are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open

when the roof is being floated off the roof legs supports or at the manufacturer's recommended settings.

- iv. Each emergency roof drain is to be provided with a slotted membrane fabric cover than covers at least 90 percent of the area of the opening.

(Auth.: HAR §11-60.1-3, §11-60.1-39, §11-60.1-90, §11-60.1-161, 40 CFR §60.112a)¹

7. Petroleum Storage Tanks 107, 109, 110, 111, 610, 611, 3520, 3522 and 3526
 - a. The true vapor pressure of the volatile organic liquid (VOL) stored shall be maintained below 11.1 psia (76.6 kPa) at all times. Determination of the true vapor pressure shall be done according to an applicable method specified in NSPS, Subpart Kb.
 - b. Petroleum storage tanks 109, 111, 610 and 611 shall each have a fixed roof with an internal floating roof and shall meet the specifications pursuant to 40 CFR Part 60, Section 60.112b(a)(1) consisting of the following:
 - i. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
 - ii. The petroleum storage tanks shall be equipped with one of the following closure devices between the wall of the storage tank and the edge of the internal floating roof:
 - (1) A foam or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal);
 - (2) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage tank and the edge of the internal floating roof. The lower seal may be vapor mounted, but both must be continuous; or
 - (3) A mechanical shoe seal.
 - iii. Each opening in a noncontact internal floating roof, except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
 - iv. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap), except when the device is in actual use. The cover

- or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- v. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating, except when the roof is being floated off or is being landed on the roof support legs.
 - vi. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
 - vii. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
 - viii. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
 - ix. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- c. Petroleum storage tanks 107, 110, 3520, 3522 and 3526 shall each have an external floating roof and shall meet the specifications pursuant to 40 CFR Part 60, Section 60.112b(a)(2) consisting of the following:
- i. Each external floating roof shall be equipped with a primary seal and secondary seal to close the space between the wall of the storage tank and roof edge. The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. The primary and secondary seals shall completely cover the annular space between the edge of the floating roof and tank wall in a continuous fashion, except as allowed in 40 CFR Part 60, Section 60.113b(b)(4).
 - ii. Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap), except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.
 - iii. The roof is to be floating on the liquid at all times (i.e., off the roof leg supports), except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or

refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

(Auth.: HAR §11-60.1-3, §11-60.1-39, §11-60.1-90, §11-60.1-161, 40 CFR §60.112b)¹

8. Each petroleum storage tank identified in Section A of this Attachment shall be equipped with a permanent submerged fill pipe. A submerged fill pipe means a fill pipe the discharged opening of which is entirely submerged when the liquid level is six inches above the bottom of the tank; or when applied to a tank which is loaded from the side, shall mean a fill pipe where the bottom of the discharge opening is no more than eighteen inches above the bottom of the tank.

(Auth.: HAR §11-60.1-3, §11-60.1-39, §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 true, accurate and maintained in a permanent form suitable for inspection and made available to the Department of Health or their representatives upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, § 11-60.1-161, §11-60.1-174, 40 CFR §60.113, §60.115a, §60.115b, §63.646, §63.654)¹

2. Petroleum Storage Tanks 106, 406, 510, 407, 408 and 605
 - a. Records shall be maintained on the petroleum liquid stored, the period of storage, and the maximum true vapor pressure (kPa or psia) of that liquid during the respective storage period. Determination of the maximum true vapor pressure shall be in accordance with 40 CFR Part 60, Section 113(b). Records shall be maintained on a monthly basis.
 - b. The internal roof seals for petroleum storage tanks 510, 407, 408 and 605 shall be inspected **periodically** and repaired or replaced as **needed**. *In no case shall the period between inspections exceed two (2) years.* This requirement is only applicable until the tanks have their seals upgraded to MACT standards. Thereafter, the requirements of Section G shall be followed.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.113)¹

3. Petroleum Storage Tank 902
 - a. Records shall be maintained on the petroleum liquid stored, the period of storage, and the maximum true vapor pressure (kPa or psia) of that liquid during the respective storage period. Determination of the maximum true vapor pressure shall be in

accordance with 40 CFR Part 60, Section 115a. Records shall be maintained on a monthly basis.

- b. The permittee shall determine compliance with the specifications in Special Condition No. C.6.b. of this Attachment by determining the gap areas and maximum gap widths between the primary seal and the tank wall and between the secondary seal and the tank wall according to the following frequencies specified below:
 - i. For primary seals, gap measurements shall be performed within **sixty (60) days** of the initial fill with petroleum liquid and at least once every **five (5) years** thereafter. All primary seal inspections or gap measurements which require the removal or dislodging of the secondary seal shall be accomplished as rapidly as possible and the secondary seal shall be replaced as soon as possible.
 - ii. For secondary seals, gap measurements shall be performed within **sixty (60) days** of the initial fill with petroleum liquid and at least once every year thereafter.
 - iii. If any storage tank is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill for the purposes of Special Conditions (i) and (ii) above.
- c. The permittee shall determine gap widths and gap areas in the primary and secondary seals individually by the procedures in 40 CFR Part 60, Section 60.113a(a)(1)(ii) and (iii), respectively.
- d. Records of each gap measurement shall be maintained. Each record shall identify the tank on which the measurement was performed and shall contain the date of the seal gap measurement, and the raw data obtained in the measurement process and the calculation required in Special Condition No. D.3.c. of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.115a)¹

4. Petroleum Storage Tanks 107, 109, 110, 111, 610, 611, 3520, 3522 and 3526
 - a. Records showing the dimensions (meters or feet) of the petroleum storage tank and the analysis showing the capacity (cubic meters or cubic feet) of the storage tank shall be maintained for the life of the tank.
 - b. Records shall be maintained on the type of VOL stored, the period of storage, and the maximum true vapor pressure (kPa or psia) of that VOL during the respective storage period. Determination of the maximum true vapor pressure shall be in accordance with 40 CFR Part 60, Section 116b(e). Records shall be maintained on a monthly basis.
 - c. Petroleum Storage Tanks 109, 111, 610 and 611
 - i. Inspections and repairs of the petroleum storage tanks shall be conducted in accordance with 40 CFR Part 60, Section 60.113b(a) as follows:

- (1) For storage tanks equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every **twelve (12) months** after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage tank, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the storage tank from service within **forty-five (45) days**. If a failure that is detected during inspections required in this paragraph cannot be repaired within **forty-five (45) days**, a 30-day extension may be requested from the Department of Health in the inspection report required in 40 CFR §60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the permittee will take that will assure that the control equipment will be repaired or the tank will be emptied as soon as possible.
 - (2) For storage tanks equipped with a double-seal system, visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage tank is emptied and degassed and at least once every **five (5) years**. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage tank with VOL; **or** visually inspect the storage tank as specified in Special Condition No. D.4.c.i.(1) at least once every **twelve (12) months** and as specified in Special Condition No. D.4.c.i.(2) of this Attachment at least once every **ten (10) years**.
- ii. The permittee shall keep records of each inspection performed as required by 40 CFR Part 60, Section 60.113b(a)(1), (a)(2), (a)(3) and (a)(4). Records shall include the storage tank identification, the date the tank was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
- d. Petroleum Storage Tanks 107, 110, 3520, 3522 and 3526
 - i. The permittee shall determine the gap areas and maximum gap widths between the primary seal and the tank wall and between the secondary seal and the tank wall according to the following frequencies:
 - (1) Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the tank or within **sixty (60) days** of the initial fill with VOL and at least **once every five (5) years** thereafter.

- (2) Measurements of gaps between the tank wall and the secondary seal shall be performed within **sixty (60) days** of the initial fill with VOL and at least **once per year** thereafter.
 - (3) If any of the storage tanks ceases to store VOL for a period of one year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of Special Conditions (1) and (2) above.
- ii. The permittee shall determine gap widths and areas in the primary and secondary individually by the procedures in 40 CFR Part 60, Section 60.113b(b)(2)(i) through (iii) and 60.113b(3).
 - iii. The permittee shall make necessary repairs or empty the storage tank within **forty-five (45) days** of identification in any inspection for seals not meeting the requirements listed below:
 - (1) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm² per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm.
 - (a) One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.
 - (b) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
 - (2) The secondary seal is to meet the following requirements:
 - (a) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall, except as provided in 40 CFR Part 60, Section 60.113b(b)(2)(iii).
 - (b) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm² per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.
 - (c) There are to be no holes, tears, or other openings in the seal or seal fabric.
 - iv. The permittee shall keep a record of each gap measurement performed as required by 40 CFR Part 60, Section 60.113b(b). Each record shall identify the storage tank in which the measurement was performed and shall contain the following:
 - (1) The date of measurement.
 - (2) The raw data obtained in the measurement.

(3) The calculations described in 40 CFR Part 60, Section 60.113b(b)2) and (b)(3).

- v. The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the storage tank is emptied and degassed. If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage tank with VOL.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161, 40 CFR §60.115b)¹

5. Petroleum Storage Tanks 101, 102, 103, 104, 105, 112, 200, 201, 202, 203, 204, 205, 206, 207, 301, 302, 303, 304, 305, 306, 307, 311, 401, 402, 403, 404, 405, 501, 502, 503, 504, 505, 506, 507, 508, 509, 511, 512, 513, 514, 515, 601, 602, 603, 604, 606, 607, 608, 609, 1103 and 2301.

The permittee shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure (kPa or psia) of that liquid during the respective storage period. Determination of the maximum true vapor pressure shall be in accordance with an applicable method in 40 CFR Part 60 Subpart K, Ka or Kb. Records shall be maintained on a monthly basis.

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

6. The permittee shall keep readily accessible records showing the dimensions of each storage tank identified in Section A of this Attachment and an analysis showing the capacity of the storage tank. This record shall be kept as long as the storage tank retains Group 1 or Group 2 status and is in operation. If a storage tank is determined to be Group 2 because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources, a record of any data, assumptions, and procedures used to make this determination shall be retained. The permittee shall use the Group 1 and Group 2 storage vessel definitions in 40 CFR §63.641.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, 40 CFR §63.646, §63.654)¹

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 Forms: External/Internal Floating Roof Petroleum Storage Tank, and Fixed Roof Petroleum Storage Tank** or equivalent forms, shall be used in reporting emissions.

Upon written request of the permittee, the deadline for reporting annual emissions may be extended if the Department of Health 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 Nos. 16, 17, and 25, respectively. These notifications shall include, but not be limited to:
 - a. Intent to shutdown air pollution control equipment for necessary scheduled maintenance;
 - b. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedences due to emergencies); and
 - c. 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 in writing **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, '11-60.1-5, '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 of Health and U.S. EPA Region 9, the attached **Compliance Certification Form**, 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 a responsible official. The compliance certification shall include at a minimum the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114 (a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and

f. Any additional information as required by the Department of Health including information to determine compliance.

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

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

5. Petroleum Storage Tanks 107, 109, 110, 111, 610, 611, 3520, 3522 and 3526

a. Petroleum Storage Tanks 109, 111, 610 and 611

i. The permittee shall notify the Department of Health in writing at least **thirty (30) days** prior to each time the petroleum storage tank is to be filled or refilled for which an inspection is required pursuant to 40 CFR Part 60, Section 60.113b(a)(1) and (a)(4). If the inspection required by 40 CFR Part 60, Section 60.113b(a)(4) is unplanned and the required **thirty (30) day** advance notice cannot be given, the permittee shall notify the Department of Health at least **seven (7) days** prior to refilling the tank. Notification shall be made by telephone followed immediately by written documentation demonstrating why the inspection was unplanned.

Alternatively, this notification including the written documentation may be made in writing and sent by express mail, so that the Department of Health receives the notice at least **seven (7) days** prior to the refilling.

ii. The permittee shall furnish the Department of Health a report within **thirty (30) days** of the following inspections:

(1) During the annual visual inspection required by Special Condition No. D.4.c.i.(1) of this Attachment, if any of the conditions described in Special Condition No. D.4.c.i.(1) are detected. Each report shall identify the storage tank, the nature of the defects, and the date the storage tank was emptied or the nature and date the repair was made.

(2) After each inspection required by Special Condition No. D.4.c.i.(2) of this Attachment that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in Special Condition No. D.4.c.i.(1) of this Attachment. The report shall identify the storage tank and the reasons it did not meet the specifications of Special Conditions Nos. C.7.b. or D.4.c.i.(2) of this Attachment and list each repair made.

b. Petroleum Storage Tanks 107, 110, 3520, 3522 and 3526

i. The permittee shall notify the Department of Health in writing at least **thirty (30) days** prior to the filling or refilling of each storage tank to afford the Department of Health the opportunity to inspect the storage tank prior to refilling. If the inspection required by this paragraph is not planned and the permittee could not have known about the inspection **thirty (30) days** in advance of refilling the tank, the permittee shall notify the Department of Health at least **seven (7) days** prior to the refilling of

the storage tank. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned.

Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Department of Health at least **seven (7) days** prior to the refilling.

- ii. The permittee shall furnish the Department of Health a report within **sixty (60) days** of performing the seal gap measurements required by 40 CFR Part 60, Section 60.113b(b)(1). The report shall contain:
 - (1) The date of measurement.
 - (2) The raw data obtained in the measurement.
 - (3) The calculations described in 40 CFR Part 60, Section 60.113b(b)(2) and (b)(3).
- iii. The permittee shall furnish the Department of Health a report within **thirty (30) days** of the inspection, if the seal gap measurement exceeded the limitations specified by 40 CFR Part 60, Section 60.113b(b)(4). The report shall identify the storage tank and contain the information specified in Special Condition No. E.6.b.ii. of this Attachment and the date the tank was emptied or the repairs made and the date of repair. The report shall also contain a **thirty (30) day** extension request if the storage tank cannot be repaired within **forty-five (45) days** and if the storage tank cannot be emptied within **forty-five (45) days**. Such an extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the storage tank will be emptied as soon as possible.
- iv. The permittee shall notify the Department of Health **thirty (30) days** in advance of any gap measurements required by 40 CFR Part 60, Section 60.113b(b)(1) to afford the Department of Health the opportunity to have an observer present.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-161; 40 CFR §60.113b)¹

6. The permittee shall submit semi-annually written reports to the Department of Health for monitoring purposes. 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) and shall include the following:
 - a. Type of VOL stored in each storage tank, dates of storage, and maximum true vapor pressure (kPa) of the VOL stored during the respective storage period by month; and
 - b. Any deviations from permit requirements shall be clearly identified.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

Section F. Agency Notification

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)

Section G. 40 CFR Part 63, Subpart CC Requirements

1. Operational and Emission Limitations

- a. Group 1 storage tanks with internal floating roofs (petroleum storage tanks 109, 111, 407, 408, 510, 605, 610 and 611) shall meet the requirements described in Special Condition Nos. C.7.b.i. and C.7.b.ii. of this Attachment.
- b. Group 1 storage tanks with external floating roofs (petroleum storage tanks 101, 102, 103, 104, 105, 106, 107, 110, 201, 202, 203, 204, 405, 406, 501, 502, 509, 902, 3520, 3522 and 3526) shall meet the requirements described in Special Condition Nos. C.7.c.i. and C.7.c.iii. of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-174; 40 CFR §63.646)¹

2. Monitoring and Recordkeeping Requirements

- a. For the Group 1 storage tanks with internal floating roofs (petroleum storage tanks 109, 111, 407, 408, 510, 605, 610 and 611), the permittee shall demonstrate compliance by complying with the requirements of 40 CFR §63.120(a)(1) through (a)(7) including the following:
 - i. The permittee shall visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), according to the schedule specified below:
 - (1) For storage tanks equipped with a single-seal system, the permittee shall perform the inspections specified below:
 - (a) Visually inspect the internal floating roof and the seal through manholes and roof hatches on the fixed roof at least once every **twelve (12) months** after initial fill, or at least once every **twelve (12) months** after the compliance date specified in Special Condition No. B.4. of this Attachment; and
 - (b) Visually inspect the internal floating roof, the seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage tank is emptied and degassed, and at least once every **ten (10) years** after the compliance date specified in Special Condition No. B.4. of this Attachment.

- (2) For storage tanks equipped with a double-seal system, the permittee shall perform either one of the inspections indicated below:
 - (a) Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the storage tank is emptied and degassed and at least once every **five (5) years** after the compliance date specified in Special Condition No. B.4. of this Attachment; **or**
 - (b) Visually inspect the internal floating roof and the secondary seal through manholes and roof hatches on the fixed roof at least once every **twelve (12) months** after initial fill, or at least once every **twelve (12) months** after the compliance date specified in Special Condition No. B.4. of this Attachment, **and**
 - (c) Visually inspect the internal floating roof, the primary seal, the secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time the vessel is emptied and degassed and at least once every **ten (10) years** after the compliance date specified in Special Condition No. B.4. of this Attachment.
- ii. If during the inspections required by Special Condition Nos. G.2.a.i.(1)(a) or G.2.a.i.(2)(b) of this Attachment, the internal floating roof is not resting on the surface of the liquid inside the storage tank and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached; or there are holes or tears in the seal fabric; or there are visible gaps between the seal and the wall of the storage tank, the permittee shall repair the items or empty and remove the storage tank from service within **forty-five (45) calendar days**. If a failure that is detected during inspections required by Special Condition Nos. G.2.a.i.(1)(a) or G.2.a.i.(2)(b) of this Attachment cannot be repaired within **forty-five (45) calendar days** and if the tank cannot be emptied within **forty-five (45) calendar days**, the permittee may utilize up to 2 extensions of up to **thirty (30)** additional calendar days each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the tank will be emptied as soon as practical.
- iii. Except as provided in Special Condition No. G.2.a.iv. of this Attachment, for all the inspections required by Special Condition Nos. G.2.a.i.(1)(b), G.2.a.i.(2)(a), and G.2.a.i.(2)(c) of this Attachment, the permittee shall notify the Department of Health in writing at least **thirty (30) calendar days** prior to the refilling of each storage tank to afford the Department of Health the opportunity to have an observer present.
- iv. If the inspections required by Special Condition Nos. G.2.a.i.(1)(b), G.2.a.i.(2)(a), and G.2.a.i.(2)(c) of this Attachment is not planned and the permittee could not have known about the inspection **thirty (30) calendar days** in advance of refilling the tank, the permittee shall notify the Department of Health at least **seven (7) calendar days** prior to the refilling of the storage tank. Notification may be made

by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Department of Health at least **seven (7) calendar days** prior to refilling.

- v. If during the inspections required by Special Condition Nos. G.2.a.i.(1)(b), G.2.a.i.(2)(a), and G.2.a.i.(2)(c) of this Attachment, the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or the seal fabric; or the secondary seal has holes, tears, or other openings in the seal or the seal fabric; or the gaskets no longer close off the liquid surface from the atmosphere; or the slotted membrane has more than 10 percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage tank with organic HAP.
- b. For Group 1 storage tanks with external floating roofs (petroleum storage tanks 101, 102, 103, 104, 105, 106, 107, 110, 201, 202, 203, 204, 405, 406, 501, 502, 509, 902, 3520, 3522 and 3526), the permittee shall demonstrate compliance by complying with the requirements of 40 CFR §63.120(b)(1) through (b)(10) including the following:
 - i. Except as provided in Special Condition No. G.2.b.vii. of this Attachment, the permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage tank, and the secondary seal and the wall of the storage tank as follows:
 - (1) Within **ninety (90) calendar days** of installation of the secondary seal, inspection of both the primary and secondary seals; and
 - (2) At least **once every five (5) years** for the primary seal and at least **once per year** for the secondary seal thereafter.
 - ii. Except as provided in Special Condition No. G.2.b.vii. of this Attachment, the permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the procedures described below:
 - (1) Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.
 - (2) Seal gaps, if any shall be measured around the entire circumference of the tank in each place where an 0.32 centimeter (1/8 inch) diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage tank. The circumferential distance of each such location shall also be measured.
 - (3) The total surface area of each gap described in Special Condition No. G.2.b.ii.(2) of this Attachment shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.

- iii. The permittee shall add the gap surface area of each gap location for the primary seal and divide the sum by the nominal diameter of the tank. The accumulated area of gaps between the tank wall and the primary seal shall not exceed 212 square centimeters per meter of tank diameter and the width of any portion of any gap shall not exceed 3.81 centimeters (1-1/2 inches).
- iv. The permittee shall add the gap surface area of each gap location for the secondary seal and divide the sum by the nominal diameter of the tank. The accumulated area of the gaps between the tank wall and the secondary seal shall not exceed 21.2 square centimeters per meter of tank diameter and the width of any portion of any gap shall not exceed 1.27 centimeters (1/2 inch). These seal gap requirements may be exceeded during the measurement of primary seal gaps as required by Special Condition No. G.2.b.i. of this Attachment.
- v. The primary seal shall meet the following requirements:
 - (1) Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters (24 inches) above the stored liquid surface.
 - (2) There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
- vi. The secondary seal shall meet the following requirements:
 - (1) The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall, except as provided in Special Condition No. G.2.b.iv. of this Attachment.
 - (2) There shall be no holes, tears, or other openings in the seal or seal fabric.
- vii. If the permittee determines that it is unsafe to perform the seal gap measurements required in Special Condition No. G.2.b.i. of this Attachment or to inspect the tank to determine compliance with Special Condition No. G.2.b.v. and G.2.b.vi. of this Attachment because the floating roof appears to be structurally unsound and poses an imminent or potential danger to inspecting personnel, the permittee shall comply with one of the following:
 - (1) The permittee shall measure the seal gaps or inspect the storage tank no later than **thirty (30) calendar days** after the determination that the roof is unsafe, or
 - (2) The permittee shall empty and remove the storage tank from service no later than **forty-five (45) calendar days** after determining that the roof is unsafe. If the tank cannot be emptied within **forty-five (45) calendar days**, the permittee may utilize up to two extensions of up to **thirty (30) additional calendar days** each. Documentation of a decision to utilize an extension shall include an explanation of why it was unsafe to perform the inspection or seal gap measurement, shall document that alternate storage capacity is

unavailable, and shall specify a schedule of actions that will ensure that the tank will be emptied as soon as practical.

- viii. The permittee shall repair conditions that do not meet the requirements listed in Special Condition Nos. G.2.b.iii., G.2.b.iv., G.2.b.v. and G.2.b.vi. of this Attachment (i.e., failures), no later than **forty-five (45) calendar days** after identification, or shall empty and remove the storage tank from service no later than **forty-five (45) calendar days** after identification. If during seal gap measurements required in Special Condition No. G.2.b.i. of this Attachment or during inspections necessary to determine compliance with Special Condition Nos. G.2.b.v. and G.2.b.vi. of this Attachment a failure is detected that cannot be repaired within **forty-five (45) calendar days** and if the tank cannot be emptied within **forty-five (45) calendar days**, the permittee may utilize up to two extensions of up to **thirty (30) additional calendar days** each. Documentation of a decision to utilize an extension shall include a description of the failure, shall document that alternative storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the tank will be emptied as soon as practical.
- ix. The permittee shall notify the Department of Health in writing **thirty (30) calendar days** in advance of any gap measurements to afford the Department of Health the opportunity to have an observer present.
- x. The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the tank is emptied and degassed.
 - (1) If the external floating roof has defects; the primary seal has holes, tears or other openings in the seal or seal fabric; or the secondary seal has holes, tears or other openings in the seal or seal fabric; the permittee shall repair the items as necessary so that none of the conditions specified above exist before filling or refilling the storage tank with organic HAP.
 - (2) Except as provided below, for all the inspections required above, the permittee shall notify the Department of Health in writing as least **thirty (30) calendar days** prior to filling or refilling each storage tank with organic HAP to afford the Department of Health the opportunity to inspect the storage tank prior to refilling.
 - (3) If the inspections required above is not planned and the permittee could not have known about the inspection **thirty (30) calendar days** in advance of refilling the tank with organic HAP, the permittee shall notify the Department of Health at least **seven (7) calendar days** prior to refilling of the storage tank. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent so that it is received by the Department of Health at least **seven (7) calendar days** prior to the refilling.

- c. For Group 1 storage tanks with internal floating roofs (petroleum storage tanks 109, 111, 407, 408, 510, 605, 610 and 611)
 - i. The permittee shall keep a record that each inspection required by Special Condition No. G.2.a. of this Attachment was performed.
- d. For Group 1 storage tanks with external floating roofs (petroleum storage tanks 101, 102, 103, 104, 105, 106, 107, 110, 201, 202, 203, 204, 405, 406, 501, 502, 509, 902, 3520, 3522 and 3526)
 - i. The permittee shall keep records describing the results of the seal gap measurements made in accordance with Special Condition No. G.2.b. of this Attachment. The records shall include the date of the measurement, the raw data obtained in the measurement, and the calculations described in Special Condition Nos. G.2.b.iii. and G.2.b.iv. of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-174; 40 CFR §63.646)¹

3. Notification and Reporting Requirements

- a. The permittee shall submit **semi-annually** written reports to the Department of Health. 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)** and shall include the following:
 - i. For Group 1 storage tanks with internal floating roofs (petroleum storage tanks 109, 111, 407, 408, 510, 605, 610 and 611)
 - (1) Results of each inspection conducted in accordance with Special Condition No. G.2.a. of this Attachment in which a failure is detected in the control equipment. For storage tanks for which annual inspections are required under Special Condition Nos. G.2.a.i.(1)(a) and G.2.a.i.(2)(b) of this Attachment, the following specifications and requirements apply:
 - (a) A failure is defined as any time in which the internal floating roof is not resting on the surface of the liquid inside the storage tank and is not resting on the leg supports; or there is liquid on the floating roof; or the seal is detached from the internal floating roof; or there are holes, tears, or other openings in the seal or seal fabric; or there are visible gaps between the seal and the wall of the storage tank.
 - (b) Reports shall include the date of the inspection, identification of each storage tank in which a failure was detected, and a description of the failure. The report shall also describe the nature of and date the repair was made or the date the storage tank was emptied.
 - (c) If an extension is utilized in accordance with Special Condition No. G.2.a.ii. of this Attachment, the permittee shall, in the next semi-annual report, identify the tank; include the documentation specified in Special

Condition No. G.2.a.ii. of this Attachment; and describe the date the storage tank was emptied and the nature of and date the repair was made.

- (2) For storage tanks for which inspections are required under Special Condition Nos. G.2.a.i.(1)(b), G.2.a.i.(2)(a) or G.2.a.i.(2)(c) of this Attachment (i.e., internal inspections), the following specifications and requirements apply:
 - (a) A failure is defined as any time in which the internal floating roof has defects; or the primary seal has holes, tears, or other openings in the seal or seal fabric; or the secondary seal (if one has been installed) has holes, tears or other openings in the seal or the seal fabric; or, for a storage tank that is part of a new source, the gaskets no longer close off the liquid surface from the atmosphere; or, for a storage tank that is part of a new source, the slotted membrane has more than a 10 percent open area.
 - (b) The report shall include the date of the inspection, identification of each storage tank in which a failure was detected, and a description of the failure. The report shall also describe the nature of and date the repair was made.
- ii. Group 1 storage tanks with external floating roofs (petroleum storage tanks 101, 102, 103, 104, 105, 106, 107, 110, 201, 202, 203, 204, 405, 406, 501, 502, 509, 902, 3520, 3522 and 3526)
 - (1) Documentation of the results of each seal gap measurement made in accordance with Special Condition No. G.2.b. of this Attachment in which the seal and seal gap requirements of Special Condition Nos. G.2.b.iii., G.2.b.iv., G.2.b.v. or G.2.b.vi. of this Attachment are not met. The documentation shall include the following information:
 - (a) The date of the seal gap measurement;
 - (b) The raw data obtained in the seal gap measurement and the calculations described in Special Condition Nos. G.2.b.iii. and G.2.b.iv. of this Attachment;
 - (c) A description of any seal condition specified in Special Condition Nos. G.2.b.v. or G.2.b.vi. of this Attachment that is not met; and
 - (d) A description of the nature of and date the repair was made, or the date the storage tank was emptied.
 - (2) If an extension is utilized in accordance with Special Condition Nos. G.2.b.vii. or G.2.b.viii. of this Attachment, the permittee shall, in the next semi-annual report, identify the tank; include the documentation specified in Special Condition Nos. G.2.b.vii. or G.2.b.viii. of this Attachment, as applicable; and describe the date the tank was emptied and the nature of and date the repair was made.

- (3) Documentation of any failures that are identified during the visual inspections required by Special Condition No. G.2.b.x. of this Attachment.
 - (a) A failure is defined as any time in which the external floating roof has defects; or the primary seal has holes or other openings in the seal or the seal fabric; or the secondary seal has holes, tears or other openings in the seal or the seal fabric.
 - (b) Documentation shall include the date of the inspection, identification of each storage tank in which a failure was detected, and a description of the failure. The nature of and the date the repair was made shall also be documented.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-174; 40 CFR §63.654)¹

¹The 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.

²The 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.